

Town Council of Pretoria.

Twenty-third

ANNUAL REPORT

of the

Medical Officer of Health

for the

Year 1926-27

Pretoria;

The Caxton Printing Works (Proprietary), Limited.

1927.



Municipality of Pretoria.

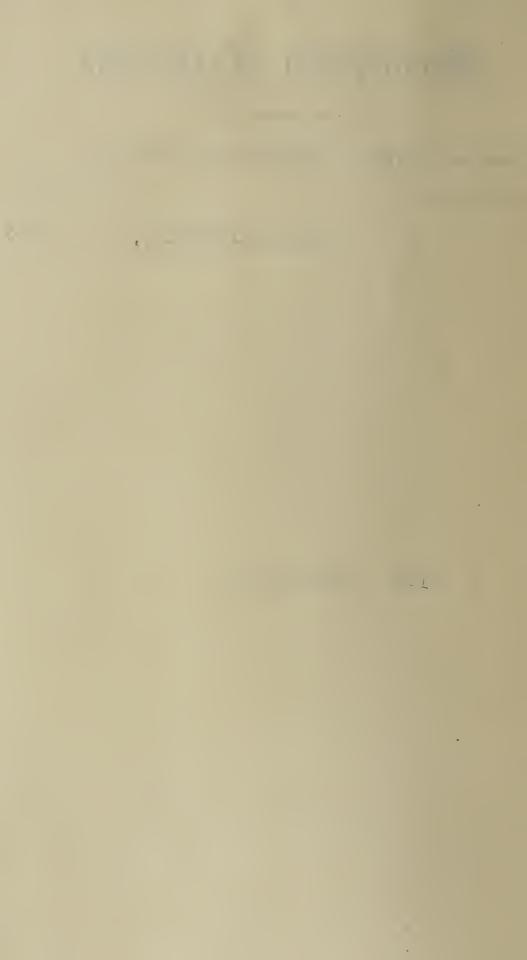
From the MEDICAL OFFICER OF HEALTH.

TELEPHONE 1221.

P.O. BOX 254.

Pretoria, DECEMBER, 192 7

WITH COMPLIMENTS





Town Council of Pretoria.

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of the

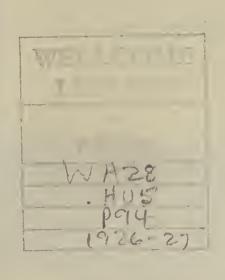
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INTRODUCTORY LETTER.

TO HIS WORSHIP THE MAYOR

AND MEMBERS OF THE TOWN COUNCIL.

Gentlemen,

I have the honour to present the Twenty-third Annual Report on the state of Health and Sanitary conditions in the City of Pretoria for the year 1st July, 1926 to 30th June, 1927.

The Vital Statistics of the European population are again very satisfactory. The low infantile mortality of last year has been succeeded by an even lower rate this year; and the general death-rate is lower than it has ever been. A slight improvement in the Coloured infantile mortality rate has also to be recorded, but this rate still remains terribly high.

There has been no special prevalence of any infectious disease during the year. The improvement in the sanitary condition of the town continues.

I have again to thank the staff of the Health Department for the zealous and conscientious manner in which they have carried out their duties. During my enforced absence on account of illness, Dr. A. Pijper acted as Medical Officer of Health. To him and to Mr. Paton, Chief Sanitary Inspector, and the other officials of the Health Department the good results achieved during the year are largely due. I desire also to record my appreciation of the kind support and encouragement extended to the Department during the year by the Chairman and Members of the Health Committee.

I am,

Gentlemen,

Your obedient servant,

J. J. BOYD,

Medical Officer of Health.

HEALTH DEPARTMENT

Staff as at 30th June, 1927.

J. J. BOYD, M.D., D.P.H Medical Officer of Health.
W. N. PATON Chief Sanitary Inspector.
H. W. GREGORY Sanitary Inspector.
W. G. GRAHAM Sanitary Inspector.
L. DRYSDALE Sanitary Inspector.
G. E. PARTRIDGE Sanitary Inspector.
F. T. NICHOLSON Sanitary Inspector.
K. C. J. LUCOUW Infectious Diseases Officer.
J. B. FISHER Dairy Inspector.
L. E. THOMAS Disinfecting Officer.
S. HEATHER Lady Health Visitor.
W. WELCH Chief Clerk.
F. THORNLEY Typist.
N. R. WADDINGTON Junior Clerk.
N. R. HUNT Messenger.
A. W. THOM Caretaker, Washhouses, etc.
R. HERMANUS Coloured Nurse-Midwife.
ISOLATION HOSPITAL.
ISOLATION HOSPITAL. A. F. BREMNER Matron.
A. F. BREMNER Matron.
A. F. BREMNER Matron. G. S. AINSLIE Nursing Sister.
A. F. BREMNER Matron. G. S. AINSLIE Nursing Sister. M. B. WAYLAND Nursing Sister.
A. F. BREMNER

Town Council of Pretoria.

Twenty-third Annual Report

___ OF THE ___

Medical Officer of Health.

YEAR 1st JULY, 1926, TO 30th JUNE, 1927.

Latitude of Pretoria: 25 degrees, 44 minutes, 30 seconds, South.

Longitude of Pretoria: 1 hour, 52 minutes, 48 seconds, East.

Mean Altitude of Pretoria: 4,480 feet.

Temperature of Pretoria: (From statistics kindly supplied by the Chief Meteorologist, Pretoria):—

1926.	Mean Max.	Mean. Min.	Highest Reading.		Lowest Reading.	Rainfall. Ineh e s Days.
July Aug Sept Oct Nov	65.36 76.08 80.13 86.47 84.70 85.99	33.63 39.50 48.27 55.40 57.60 60.87	74.4 on the 85.7 ,, 93.8 ,, 95.9 ,, 96.6 ,, 94.1 ,,	3rd 19th 23rd 16th 1st 27th	25.0 on the 23rd 26.8 ,, 6th 38.2 ,, 4th. 45.0 ,, 6th 50.7 ,, 29th 54.4 ,, 1st	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
1927. Jan	87.93 83.71 79.96 78.60 74.57 69.06		100.8 ,, 94.0 ,, 87.5 ,, 83.3 ,, 83.8 ,, 76.4 ,,	16th 18th 14th 13th 1st 1st	50.2 ,, 9th 54.2 ,, 7th 50.2 ,, 21st 41.0 ,, 28th 32.0 ,, 15th 32.6 ,, 9th	4.10 ,, 11 4.84 ,, 9 1.42 ,, 12 0.61 ,, 4 — ,, —

19.93 on 70

Area of Municipality:—

Exclusive of Town Lands: 161/4 square miles.

Inclusive of Town Lands: 40 square miles.

The town is built on and between parallel ranges of quartzite hills running East and West, the soil in the valley being largely shale.

Population:

The total European population of Pretoria, inclusive of inmates of Central Prison, Mental Hospital and Leper Asylum as obtained at the Census in May, 1926, was 42,465, eomprising 21,858 males and 20,607 females.

Of these persons 1,033 males and 437 females were inmates of the institutions mentioned above and should not, therefore, be included in the population of Pretoria.

The numbers of the European population at May, 1926, were therefore Males 20,825, females 20,170. Total 40,995.

The population at 31st December, 1926, is estimated to be:—

Europeans 41,500.

Coloured Persons 23,000.

As regards the age distribution of the population at the time of the Census, the following figures have been kindly supplied by the Director.

	1926.		1921.	In	crease.
Under 5 years	4,001		3,562		439
5—10 years			3,638		118
10-15 years			3,683		411
15—20 years			3,473		1,361
Over 20 years Males.	*	Males.	Females.	Males.	Females.
	11,869	10,774	9,796	1,667	2,073

With reference to the Coloured Population, the following figures have been obtained by the Superintendent of Locations as regards those residing therein at 30th June, 1927.

Native and Coloured.	ADULTS.		CHIL	DREN.	
	Males.	Females.	Males.	Females.	TOTAL.
Marabastad	886	763	800	879	3,328.
Sehoolplaats		186	310	440	1,106.
Bantule		604	790	982	2,953
	1,633	1,553	1,900	2,301	7,387
In Asiatic Bazaar	612	400	120	178	9.510
Cape Location	338	286	246	330	2,510
	2,583	2,239	2,266	2,809	9,897

From these figures it would appear that there has been an increase in the Coloured Population living in the Locations of about 900 persons since the Census of 1921.

The principal Vital Statistics for the year are:--

		Other S.A.			All		
E	luropean.	Native.	Coloured	Asiatics.	Colonred	Total.	
Population	41,500	15.18	22.46	18.50	16.00	10.20	
Birth rate (corrected for visitors)	21.37	15.18	37,81	47.16	19.30	20.63	
Death rate (corrected for visitors)	6.99	15.18	22 46	18,50	16.00	10.20	
Infantile Mortality per 1,000 Births	48.48	388.51	246.37	101.26	315.31	137.49	
Percentage of illegitimate to total							
births	4.51	34.45	31.88	7.59	29.28	12.77	

Births:--

1,075 European births were reported as occurring within the Municipal area, but 188 of the infants were born of mothers not resident in the town. The **Pretoria Births** therefore number 887, being a decrease of 15 when compared with the corresponding figure for 1925-1926.

The European Birth Rate is 21.37 per 1,000.

The Coloured Births numbered 458. Fourteen of the infants were born to non-resident parents. The Pretoria births therefore numbered 444, being 49 more than in the previous year. They comprise 296 Natives, 69 Eurafricans and 79 Asiatics.

The Coloured Birth Rates are: Native 15.1 per 1,000; Eurafrican 37.8; Asiatic 47.1; All Coloured 19.3.

Rates of natural increase, being the excess of births over deaths in proportion to population were as follows: European 14.38 per 1,000; Eurafrican 15.3 per 1,000; Asiatie 28.6 per 1,000. As regards Natives, the number of deaths exactly equalled the number of births.

Illegitimacy: Forty of the European births were illegitimate, being 4.51 per eent. of the total births.

Deaths:-

1,068 deaths were certified during the year. Of these 205 Europeans and 205 Coloured Persons were inmates of Hospitals and other institutions and were not resident in Pretoria prior to admission to such institutions. These include 126 deaths in General and Private Hospitals, 55 in the Mental Hospital and 6 in the Leper Asylum. There remain 658 deaths, giving a total death-rate of 10.20 per 1,000.

The deaths in the various races were:-

European	290	Eurafrican	41
Native	296	Asiatie	31

The **European Death Rate** is therefore 6.99 per 1,000 as compared with 7.7 per 1,000 in the previous year.

The Coloured Death Rates are: Native 15.1; Eurafriean 22.4; Asiatic 18.5; and All Coloured 16.00 per 1,000.

The subjoined table gives a comparison with some other South African towns and with England and Wales.

ENGLAND AND WALES.

Birth Rate, Death Rate, and Infantile Mortality during the Year 1926 (Provisional figures).

	Birth Rate	Death Rate	Deaths
	per 1,000	per 1,000 total	under one
	Total	Population	year per
	Population	(Crude Rate).	1,000 Births.
England and Wales	17.8	11.6	70
105 county boroughs and great towns, including London	18.2	11.6	73
158 smaller towns (populations from 20,000			
to 50,000 in 1921)	17.6	10.6	67
London	17.1	11.6	64

The death rate for England and Wales relates to the whole population, but that for London and the two groups of towns to the civil population only. The birth rate and infantile mortality rate for London have been provisionally corrected for transfers.

The birth rate for England and Wales is 0.5 per 1,000 below that of 1925, and, with the exception of the rate in 1918, the last year of the war, is the lowest recorded.

The death rate is 0.6 per 1,000 below that recorded in the previous year and is equal to that of 1923, the lowest recorded rate. The infantile mortality rate is 5 per 1,000 births below that of 1925, but 1 per 1,000 above that of 1923, the lowest on record.

SOUTH AFRICAN TOWNS.

		Birtl	h Rates. Corrected		Rates.		fantile ortality.
m	Year	Euro-	All	Euro-	All	Euro-	All
Town	Ending.	pean.	Coloured	pean.	Coloured	pean.	Coloured.
Pretoria		21.37	19.30	6.99	16.00	48.48	315.31
Kimberley	,,	22.7		10.8		69.8	
Durban		17.82		9.37	—	36.26	
Port Elizabeth		25.3	45.49	10.6	27.8	81.21	219.02
East London		22.0	44.0	8.5	43.0	59.0	420.0
Pietermaritzburg	,,	19.05		7.61		43.47	
Cape Town	,,	20.52	50.29	10.37	27.96	67.38	186.59
Bloemfontein	,,	20.59		8.0		72.1	

Infantile Mortality:-

The total number of infants who died before the end of their first year of life was 216. Of these 69 were European and 147 were Coloured infants. Twenty-six of the Europeans and seven of the Coloured infants either belonged to mothers from the country who had eome to town for confinement and died from congenital causes, or were brought to Pretoria already suffering from the disease which caused death.

There were therefore 43 European and 140 Coloured infantile deaths belonging to Pretoria and on these figures the rates are based.

Europeans.—The European Infantile Mortality Rate is 48.48 per 1,000 births. This is 2.5 below the rate for the previous year, and constitutes a record figure for Pretoria.

Of these deaths no fewer than 27 were due to congenital causes; only six were due to diarrhoeal diseases; three to bronchitis and broncho-pneumonia; two to infectious diseases; and five to other eauses. The lowness of the rate is again chiefly due to the smallness of the diarrhoeal figure.

Enteritis (chiefly Zymotic Diarrhoea) gives an infantile death rate of only 6.6 per 1,000, being less than a third of the average for 1915-1925. These deaths occurred at varying age periods from 2 months to 10 months. One of these infants was premature and never thrived from birth; in another the fatal illness was secondary to measles. All the infants were artificially fed for some time prior to death.

Three of the deaths were in the Central area and two in the West End. With one exception all these infants had been visited by the Health Visitor.

Broncho-Pneumonia.—In two instances death occurred under the age of two months. All were breast fed. In one there was a suspicion of syphilitic infection.

Infectious Diseases.—One death was due to whooping cough and one to influenza.

Congenital Causes give a mortality rate of 30 per 1,000, which is considerably above the average of previous years. Sixteen of these deaths were due to premature birth. In the majority of these cases premature delivery was ascribed to the mother's ill-health. Frequently a previous liability to misearry was noted. Five of the deaths were due to injury or infection at birth or immediately thereafter. Two of these infants were found abandoned. Four deaths were due to congenital malformation; one to congenital debility, and one (illegitimate child) to marasmus.

Of the total 43 deaths, 10 occurred on the first day of life, 17 in the first week and 27 in the first month, leaving only 16 deaths in the later months.

European Stillbirths numbered 27. In 15 cases the infant was delivered at full time, and in the others between the sixth and ninth months. In three cases placenta praevia existed; in six labour had been very prolonged on account of the size of the child, in three venereal disease, and in five other illness of the mother existed. In four instances there had been strain or accident.

District Infantile Mortality (vide Table 3). The highest rates are in the West Central Districts and Railway Reserve. The comparatively low rates in Good Hope and Pretoria West are noteworthy.

Deaths at Age 1-5 years. There were only twelve deaths at this age during the year, as contrasted with eighteen in the previous year.

Three were due to enteritis, two of these being in the Central area—children just over one year; two were due to broncho-pneumonia; two to zymotic disease, viz: influenza and diphtheria. Congenital heart disease, marasmus and aecident were each responsible for one death, and two were due to other causes.

The average annual number of deaths at this age for the five years 1922—1927 is 15.6, as contrasted with an average of 24 in 1917-1922, in spite of a considerable increase in the population living at this stage. The average for 1912—1917 was 27. The improvement is partly due to child welfare work and partly to the reduction in the amount and severity of measles and whooping cough.

Report of Health Visitor (Miss S. Heather):—

The following visits were made:-

First visits to newly born infants	580
Subsequent visits to these infants 1	
Special visits to sick children	127
Deaths of children under 5 years of age investigated	55
Stillbirths investigated	27
Puerperal septieaemia eases investigated	8

Of the 127 special visits paid to siek children, 39 were to three premature babies, one weighing 3 lbs. and two weighing 3½ lbs. each; two are doing well; one died.

Child Welfare Bureau.—A clinic has been held at the offices of the Health Department, 240, Van der Walt Street, every Tuesday and Friday afternoon, and during the year 230 mothers have attended bringing 233 babies for weighing and advice and paying in all 1,127 visits. These are the largest numbers of mothers and visits in any year. Other years are as follows:—

1923	3-24.	1924	1 -25.	1925-26.		1926	5-27.
Mothers.	Visits.	Mothers.	Visits.	Mothers.	Visits.	Mothers.	Visits.
46	493	139	588	201	1,099	230	1.127

There has been a steady increase in the number of mothers attending, and now more than a quarter of all infants in the Town are brought to the Bureau.

Visits to Child Welfare Bureau divided into Districts:-

District.	Mothers.	Babies.	Visits.
Town, S.W. Central	43	45	163
Town, S.E. Central	37	37	257
Town, N.W. Central	33	33	207
Town, N.E. Central	26	27	155
Good Hope	9	9	38
West End	42	42	127
Sunnyside	11	11	65
Areadia	4	4	5
Railway Reserve	13	13	39
Prison and Barracks	6	6	4 3
Roberts Heights	1	1	10
Brooklyn	1	1	8
Hatfield	2	2	8
Outside Areas	2	2	2
TOTAL	230	233	1,127

Only four of these babies have died during the year, i.e. a rate of 17.4 per 1,000.

During the year 29 mothers have received one pint of milk per day for periods varying from one to twelve months, whilst 225 tins of Lactagol, 174 pots of Virol, 8 bottles of Cod Liver Oil, and 340 tins (1,020 lbs.) of Lactagen were supplied. Some given free to people in very poor circumstances, the others sold at cost price.

Coloured Children:-

The deaths of Coloured children under one year of age numbered 140, comprising 115 Natives, 17 Eurafricans and 8 Asiatics.

Natives.—The infantile mortality rate is 388.5 per 1,000 births, a considerable improvement over that of the previous year (483 per 1,000). Thirty-eight of the deaths were due to diarrhoeal diseases; forty-five to broughitis and broncho-pneumonia; twenty-four to congenital causes.

Eurafricans.—The infantile mortality rate is 246.38 per 1,000. Four of the deaths were due to diarrhoeal diseases; five to broncho-pneumonia and seven to eongenital causes. The rate is higher than that of the previous year (220 per 1,000).

Asiatics.—The infantile mortality rate is 101.26 per 1,000. Five of the deaths were due to diarrhoeal diseases.

Age 1—5 Years.

There were 66 deaths at this age period, being 9 more than in the previous year. The figure is, however, somewhat below the average for the quinquennium. 56 of these deaths

were in Natives and 10 in Eurafricans; none in Asiatics. Of the Native deaths, 23 were due to bronchitis and broncho-pneumonia; and 28 to diarrhoeal diseases. The Eurafrican deaths include 7 from bronchitis and broncho-pneumonia, but only 1 from diarrhoea.

The Coloured Nurse-Midwife employed by the Council earried out the following work:

First visits to newly born infants	124
Subsequent visits to these infants	
Special visits to sick children	249
Deaths under 5 years of age investigated	26
Stillbirths investigated	7
Puerperal septicaemia eases investigated	2
Confinement eases attended	56

The Child Welfare Bureau in the Cape Location was open on 49 occasions, 1,312 visits being paid by mothers.

The Native Nurse attached to the Venereal Clinic supplemented this work by paying:

First Visits to newly born infants	174
Subsequent visits to these infants 1	,329
Special visits to siek ehildren	129
Deaths under 5 years of age investigated	176
Stillbirths investigated	
Puerperal septicaemia eases investigated	1

This nurse also attends at the Municipal Compound Hospital every morning when. Coloured and Native children are brought to the Medical Officer of Health.

Number of these attendances: 1,139.

In spite of the large amount of work that has been carried out during the last five years—viz: anti-venereal elinies, infant welfare clinic, provision of trained midwife and visitation of newly born infants—we cannot claim to have achieved much progress as regards illness and mortality in Coloured ehildren. A fall in the infantile mortality rate in one year is apt to be followed by a rise the following year. Improved housing as it exists in the Bantule Location does not prevent the infantile mortality there being as high as it is in Marabastad.

Taking the period 1917 to 1927, and comparing the first five years with the last five years we find that for Natives the average annual infantile mortality rate has fallen from 532 per 1,000 to 420 per 1,000, and the number of deaths at ages 1 to 5 years from an average of 62 to 54.

On the other hand the rate for Eurafrican infants has only fallen from 249 per 1,000 to 243.5 per 1,000, whilst that for Asiaties has actually increased from 136 per 1,000 to 146 per 1,000.

Deaths at ages over 5 years numbered 397, being 235 Europeans, 125 Natives, 14 Eurafricans and 23 Asiatics. All the figures are lower than those for the previous year except that for Natives, which is practically the same.

The principal eauses of death were:-

- re principal causes of death were.					
	Euro	pean.	Coloured.		
		Average 5 years.		Average 5 years	
	1926-27	1922-26	1926-27	1922-26	
Cancer	24	26.4	1	4	
Heart Disease	35	30.4	18	15	
Pneumonia	16	11.8	23	34	
Bronehitis and Broncho-pneumonia	10	11.4	20	9.6	
Influenza	11	12.6	11	8.8	
Typhoid Fever	2	4.8	8	9.8	
Tubereulosis	10	9.4	21	21.4	
Disease of Arteries	13				
Kidney Disease	15	11.2	6	3.6	
Apoplexy (Cerebral Haemorrhage)	8	8.6	1	2.2	
Diabetes	6				
Disease of Parturition	7	4.0	5	3.6	
Old Age	8	7.2	7	5.4	
Suicide	5	7.4	3	2.0	
Accident	17	10.4	8	7.4	

Cancer.—The number of deaths in Europeans is under the average. 23 of the deaths were in persons over 45 years of age. The death-rate per 1,000 of population is 0.57. The average rate for the period 1922-1927 is 0.655 per 1,000. The erude rate in England and Wales for 1921-1925 was 1.27 per 1,000; but it has to be borne in mind that the number of elderly persons in the English population is considerably greater than in ours.

Heart Disease.—The number of deaths both in European and Coloured persons is eonsiderably above the average. Nine of the European deaths were in persons under 45. The European death-rate is 0.84 per 1,000. The average rate for the period 1922-1927 is 0.84 per 1,000.

Influenza.—The number of deaths in Europeans is below the average of the previous five years. Seven of the deaths were in persons over 45 years.

Pneumonia and Bronchitis.—The number of deaths under these headings is eonsiderably higher than last year, both for European and Coloured persons. These may include some deaths from post influenzal pneumonia.

Apoplexy (Cerebral Haemorrhage).—Whilst the number of deaths under this heading is just about the average of the previous five years, there are no less than thirteen deaths ascribed to diseases of arteries. A large proportion of these were eases of arterio-selerosis resulting in death from cerebral haemorrhage. In the previous year disease of arteries accounted for only six deaths.

Diseases of Parturition.—The number of deaths under this heading is high, being nearly twice the average. Five of the seven deaths were due to Septicaemia (Puerperal fever). In addition to the five fatal eases, three other eases occurred in the poorer quarters of the fown where the standard of cleanliness is rather low.

Tuberculosis.—The number of deaths both in Europeans and Coloured persons was just about equal to the average of the preceding five years.

Europeans.—Of the nine deaths from phthisis one was a military pensioner who died at Roberts Heights and with regard to whom details were not obtained. Three of the other eases had contracted the disease outside Pretoria. Five of the eases had been born in South Africa. Only four were notified before death.

Of the deaths in Coloured Persons fifteen were Natives. Two of these deaths were in the Mental Hospital and two at Roberts Heights. Two others had definitely been infected outside the Municipality. Most of the local cases were in the locations.

Five of the deaths were Eurafricans, all in the Cape Location.

There was one death of an Indian.

Of 47 European eases of tubereulosis notified since January, 1920 twelve are still living in Pretoria, three of these having apparently recovered. Twenty-one are dead and eleven have left the town.

Action Taken.—Two of the European cases were sent to Nelspoort Sanatorium. Several of the Coloured cases were admitted to Pretoria Hospital.

The large number of deaths from Accident is noteworthy.

INFECTIOUS DISEASES.

Typhcid Fever.—The total number of cases notified was 193. Of these, however, 100 had been imported into the Municipality after the onset of illness.

Of the 93 other eases, being 67 Europeans and 26 Coloured persons, five of the former and three of the latter had undoubtedly been infected outside the Municipality, although resident here when the illness began.

There remain 85 locally infected cases, comprising 62 Europeans and 23 Coloured persons. The number of local cases last year was 88, being 57 Europeans and 31 Coloured persons.

The number of deaths from this disease in residents of the town was 10, comprising 2 Europeans and 8 Natives.

The attack and death rates are as follows:-

	Europeans.	Coloured Persons.
Attack rate (local cases) Death rate	the state of the s	1.130 per 1,000. 0.348 per 1,000.

Of the local **European** eases, nine were secondary to previous eases in the same houses. There remain 53 primary eases. Twenty-one of these were definitely proved to have been infected by contaminated **Milk**. Details regarding these outbreaks are given below.

The remaining 32 European primary eases were distributed as follows:—Good Hope 5 cases; Central area 6; Areadia 7; Sunnyside 5; West End 5; and Riviera 4.

Good Hope.—This was the most badly infected district in the Town, there being 5 primary and 2 secondary eases. The continuance of the conservancy system of sewage disposal is undoubtedly largely responsible. The adoption of water-carriage drainage for all houses in this area is urgently required. The first ease was notified very late, was followed by two secondary eases, and may have been the source of infection of some of the cases in other houses.

Central Area.—There were 6 primary eases and 1 secondary in this area (population 14,960). None of the cases occurred in the South-Eastern quarter. Two of these eases were of a very doubtful character. In two others infection outside the Municipality seemed likely. In one ease infection appeared to be from a Native servant who was shown to be a carrier by bacteriological and blood tests. The other ease was a child in a boarding school, probably infected there.

Arcadia.—The seven eases occurred in 6 houses. In the ease of one—a child—infection appeared to be from an undiagnosed attack in the European nurse-girl in the house. No source of infection could be determined in the other eases.

Sunnyside.—One of the cases was doubtful. Source of infection of others was not traced.

West End.—There were only 5 eases in this area contrasted with 13 in the previous year. One of these eases had apparently been infected in hospital. One occurred in a house next door to where there had been a ease a year before. One—a child—had been infected by a native carrier.

Riviera and Rietendale.—Two of these eases were in one house and a third was a playmate of these ehildren. The fourth ease was in Rietendale where the water supply from shallow wells, is the probable channel of infection.

Outbreaks due to infected Milk.—The first of these outbreaks occurred in November, 1926. There were altogether four eases, all Europeans, of ages varying from one and a half to twenty-two years, living in different parts of the town. In all four illness eommeneed in the second week of November. The only common factor was milk supply from a dairy outside the Municipality. Blood specimens were obtained from all Native employees, and of these one gave a positive complement fixation reaction to bacillus typhosus. This boy was removed to the Isolation Hospital for observation, and was found to be an intestinal carrier.

The second outbreak, which was of a more serious character, occurred in March—April, 1927, during the absence of the Medical Officer of Health on leave. Dr. A. Pijper, the Acting Medical Officer of Health, gives the following particulars:—

There were altogether 21 European eases of typhoid fever in which the source of infection was determined as due to infected milk coming from a dairy in New Muckleneuk. Four of these persons were resident outside the Municipal boundary whilst seventeen were resident in the Town.

With one exception all the cases occurred in March and April. One case, which was notified in June, was evidently secondary to a previous case in the same house which had occurred in March, but had been undiagnosed. Attention was first directed to the dairy in question (called "A" below) by the occurrence of a case in the family of the dairyman. As the dairy is outside the Municipal boundary this case was not notified but only heard of indirectly, on the 24th March. A couple of days before a case had been notified in the Municipality in which unboiled milk from the Dairy "A" had been used by the patient. On the 25th March, the Acting Medical Officer of Health visited the dairy for the purpose of enquiring into the sanitary conditions of the premises and the health of the dairy workers. Sanitary conditions were found rather unsatisfactory, and it appeared that there had recently been some illness amongst the native employees, although at the time of the visit the natives were all reported well and at work.

Blood specimens were taken from all the eleven native employees, with the result that in seven cases the blood gave a positive result with complement fixation test to bacillus typhosus. Dr. Pijper concluded that some of these natives had recently suffered from typhoid fever, and in view of the possibility of one or more of them being active carriers, and of others developing the disease, ten of them were removed by Magistrate's Order to the Isolation Hospital for observation and treatment. The one native who was allowed to remain had given a negative reaction and had been working in the dairy for sixteen years. Of the natives taken to the Isolation Hospital, two developed typhoid fever and were transferred to the General Hospital. The others were treated and only discharged when they had ceased to be infectious. This action proved entirely successful, no further infection taking place after the removal of the natives.

Coloured Cases.—Fourteen of these cases were in the locations. Several of them may have been infected in the first of the milk outbreaks, but exact evidence was lacking. There were two cases in the Mental Hospital and two in the Municipal Compound. One case was in a female hostel. There were only four cases notified from the European districts of the Town.

It is noteworthy that out of a total of 23 cases notified eight died. The inference is that only very severe cases are reported. Many natives probably suffer from slight attacks, a fact which is also indicated by the milk outbreaks described above and by the discovery of several carriers in European houses. For the sake of themselves and their families, European employers cannot be too careful in obtaining proper advice and treatment for sick natives in their employment. Any illness in a Coloured person should be treated as infectious until proved otherwise.

Sanitary Circumstances.—Of the local cases 46 Europeans and 12 Coloured persons were living in houses with water-carriage drainage, whilst 21 Europeans and 14 Coloured persons were living in houses with conservancy system of disposal.

Seasonal Distribution.—Exclusive of the cases due to milk infection, there were in the four months July to October only six cases notified; in the three months November to January there were 37 cases, and in the five months February to June 29 cases.

As regards the **Age** and **Sex** of **Europeans** attacked (Table No. 11), 34 cases were males and 33 females. 23 were under 10 years of age and 39 under 15 years. Fifteen were aged 15—25 years, whilst there were only thirteen cases over 25 years of age. Of the 21 cases due to milk infection twelve were under 15 years and nine over 15 years. Of the others twenty-seven were under 15 years and nineteen over 15 years.

Action Taken.—Exclusive of imported cases which went direct to hospital, 36 European cases and 18 Coloured cases were removed to hospital for treatment. The other cases were quarantined in their own homes and kept under observation and control there. Disinfection of premises, bedding and clothing was carried out on removal of the case or at the termination of the illness. Special disinfection of conservancy latrines and drains not connected with sewers was included.

In practically all cases diagnosis was confirmed by blood examination. Blood specimens were also obtained from four Europeans and twelve Coloured persons who were suspected to be carriers. Of these ten natives gave a positive reaction. Three of these were proved to be carriers.

Inoculation by Besredka Method was carried out in altogether 1,497 persons, comprising 545 Europeans and 952 Coloured persons. These included (a) 830 persons living in houses in which cases were notified; (b) 296 persons employed in dairies; (c) 171 newly engaged natives at Municipal Compound, and (d) native patients at Mental Hospital. The protection afforded by this method, in which the dead cultures of typhoid bacilli are administered by the mouth appears to be efficacious. As a method of preventing the contamination of milk by natives suffering from enteric fever or acting as intestinal carriers, it appears to afford much greater security than does the periodical blood testing of native dairy employees.

Scarlet Fever.—Only 26 cases were notified during the year. This is the third successive year in which the prevalence of this disease has been low. There was one death from Scarlet fever, a case at the Mental Hospital. All the cases were Europeans.

Twelve of the cases occurred in July and August and eight in June. From 1st September to 31st May only six cases were reported.

Nine of the cases were in Sunnyside and six in the West End. Five of the Sunnyside cases occurred in June and were due to school infection. The attack rate in children under 15 years was 2.19 per 1,000. Average for the period 1911-1921 was 12.1 per 1,000.

Action Taken.—Eleven of the cases were removed to the Isolation Hospital. The others were kept in quarantine in their homes which were periodically visited. Disinfection of premises and clothing was carried out on removal of case or at the termination of the illness.

Diphtheria.—There were 28 cases notified but six of these had been imported into the Municipality after the onset of illness. There were therefore 22 local cases of which 20 were Europeans and 2 were Coloured persons.

Five of the cases were secondary to others in the same houses. There were therefore 15 primary cases. Of these five were in the Railway Reserve and three in Pretoria West. Several of the cases were mild and of a rather doubtful character. A number were associated with sanitary defects on the premises, and in several instances there was a history of previous cases in the family in former years. There was only one death from this disease amongst the local cases, that of a European child.

Action Taken.—Nineteen of the cases were removed to Hospital, ten to the General Hospital and nine to the Isolation Hospital. 64,000 units of antitoxin were issued to medical practitioners for use in notified cases. Fifteen throat swabs were taken for diagnostic purposes and for the detection of carriers. Eight of these proved positive. Home-treated cases were quarantined and kept under observation. Disinfection of premises and bedding was carried out.

Measles.—226 Primary cases of this disease were notified. In the houses in which the European cases occurred there were 220 susceptible persons, i.e. those who had not previously had measles. Amongst these there occurred 192 secondary cases. The total number of European cases was therefore 400. There were only two deaths from the disease, both Coloured children. Of the primary cases 209 were Europeans and 17 were Coloured persons.

Europeans.—35 of the cases were under5 years of age, and 154 between 5 and 15 years.

164 of the cases occurred in September and October, and only 45 in the other 10 months. On seventeen occasions the infection was introduced from outside the Municipality. In August a child attending the Convent School who had been infected at Lourence Marques infected some 20 other children at the school. The September-October outbreak was caused by someone who had been infected at East London attending a crowded Church fete in Sunnyside. A further extension of this outbreak was caused by one of the cases infected at the Church fete carrying the infection into Sunnyside School. By the 15th October the outbreak had practically ceased.

Coloured Persons.—Although only 17 cases were notified it is probable that a good many others occurred. Fourteen of the cases occurred in September-October, eleven being in the Cape Location.

Action Taken was on the usual lines, viz: confinement of cases and susceptible contacts to their homes. Whilst it is realised that it is practically impossible for anyone to escape an attack of this disease sooner or later, it is of great importance that such illness should be avoided until the age of 5 years has been passed. Under that age measles is a dangerous disease, attended with a considerable mortality and liable to leave serious permanent damage to the constitution of the patient. The action taken by the Health Department if supported by the cordial co-operation of parents should very largely prevent children being attacked by measles prior to the school-going age. The method adopted whereby in the case of the majority of infected children parents are warned beforehand of the probable onset of the disease should secure early treatment and probably lessen the severity of the attack. As an indication that the expected results have followed it is noteworthy that the measles death-rate in Europeans under 5 years has dropped from:

1.22 per 1,000 in period 1904-1919, to 0.32 per 1,000 in period 1919-1924, and to 0.25 per 1,000 in period 1924-1927.

Whooping Cough.—114 cases of this disease were notified. Of these, however, six had been brought into the town after the onset of illness, and seven others had been infected outside though resident here when the illness began. Of the locally infected cases there were 93 Europeans and 8 Coloured persons.

In the houses where European cases occurred there were resident 117 susceptible children and from these 94 secondary cases developed.

As regards European primary cases, excluding imported cases, 43 were under 5 years of age, 53 between 5 and 10 years, and only 4 over that age. This indicates that the spread of the disease was largely from house to house, and that the schools were responsible to a comparatively small extent. From this point of view whooping cough offers a marked contrast to measles, where infection is so largely spread in the schools.

The most heavily affected district was Pretoria West where forty per cent. of the European cases occurred.

Malaria.—Only 12 cases were notified during the year. Of these two were imported, and six others had been infected outside the Municipality. There were only four cases, all Europeans, in which local infection appeared to have occurred. Three of these cases lived near the railway lines to Delagoa Bay and Pietersburg.

There were no deaths from this disease.

Cerebro-Spinal Meningitis.—Eleven cases were notified as contrasted with 19 and 52 in the two preceding years. Two of the cases were imported. Of the nine local cases, four were Europeans and five were Coloured persons.

The European cases were all children under 15 years living in different parts of the town, and quite unconnected with each other. The Coloured cases comprised two adults and three children.

There were two deaths from the disease, one in a European and one in a Native.

Action Taken. Seven of the cases were removed to Hospital.

REPORT OF MEDICAL OFFICER: ANTI-VENEREAL CLINICS, Dr. A. PIJPER, for the YEAR, JULY 1st, 1926, to JUNE 30th, 1927.

(a) **European Clinic.**—The number of new patients seen was 90, of whom 57 were males and 33 were females. Of the males, 31 suffered from gonorrhoea and 26 from syphilis, whilst for the females these figures were 3 and 30 respectively.

The total number of attendances was 757, of which 419 were by males, and 338 by females. Most of the patients were adults.

During the year 148 blood tests were performed, and 51 microscopic examinations. It frequently happens that a person only attends the clinic once in order to have the possibility of venereal disease excluded by a special examination.

The total number of salvarsan injections given was 589, of which 303 were given to males and 286 to females.

On the whole the patients attended the clinic quite regularly. During the year 17 patients with syphilis and 21 with gonorrhoea could be discharged as cured, having lost all signs of their disease. In about an equal number of cases excellent clinical results were obtained, without the disease being completely eradicated.

(b) Natives and Coloured Persons.—Altogether 894 new persons were seen, 231 males and 663 females, and a large number of these were children and infants.

Gonorrhoea was seen in 38 males, but not in females. All the others, 856 in number, were suffering from syphilis.

The total number of attendances was 3,464 of which 770 were by males and 2,694 by females. The average number of attendances was about four per patient, and this is quite enough to bring about marked improvement in most cases, and certainly closes up sources of infection.

Blood tests during the year numbered 612 and microscopic examinations 22.

The male patients received 599 injections of salvarsan, and the females 2,259, making a total of 2,858 injections.

The number of domestic servants attending the clinic is increasing, but it should be much greater still. A considerable proportion of the Native and Coloured patients come from areas outside the Municipality.

At least three coloured women during the year gave birth to a healthy baby as a result of the treatment received, their former pregnancies having always resulted in stillbirths.

There are indications that the incidence of syphilis is decreasing among the Native population of Pretoria and surroundings.

Dental Clinic.—This clinic is conducted by a committee of the local dentists in a suite of rooms in the Health Department offices. In addition to providing this accommodation the Town Council gave a grant of £150 to the clinic during the year. The clinic is for Europeans only and the number of patients who attended was 750, being 600 adults and 150 children. The revenue derived from these patients amounted to £86 19s. 0d.

ISOLATION HOSPITALS.

Accommodation for the isolation and treatment of persons suffering from infectious diseases is provided in the Isolation Hospitals. These comprise the Isolation Hospital proper, brick buildings opened in 1911 and extended in 1922, and the Lazaretto, wood and iron buildings some ten years older. The buildings are capable of accommodationg twenty-six European and twenty-two Coloured patients.

The staff at the 30th June, 1927 consisted of a Matron, three trained nurses, one probationer nurse, and one European and six Coloured servants.

During the year 68 cases were treated as follows:—

Remaining at end of year:	European.	Coloured.
Diphtheria	1	_
Scarlet fever	3	
Mumps	1	
Cerebro spinal meningitis	1	******
Admitted during the year:		
Scarlet fever	12	1
Cerebro spinal meningitis	5	None Control of Contro
Diphtheria	12	
Smallpox	militaring	1
Smallpox (?) Chickenpox	1	1
Smallpox (?) Syphilis	montality .	1
German measles	1	-
Measles	4	2
Typhoid fever	6	1
Typhoid fever carriers Wheeping Cough		13
Whooping Cough	1	
Remaining from previous year:		
Scarlet fever	3	
Typhoid fever carrier		1

In addition to the foregoing ten Native Smallpox contacts were admitted, but the disease did not develop in any of them.

Only eight of the cases, and all Europeans, were admitted from outside the Municipal area, three being cerebro spinal fever, four diphtheria and one searlet fever.

There was one death in the Institution during the year, a European child from Brits with Diphtheria.

REMOVAL OF CASES OF INFECTIOUS DISEASES, DISINFECTION OF PREMISES, Etc.

During the year the motor ambulance covered a total distance of 1,350 miles, and the van used in disinfecting work a total distance of 4,860 miles. The latter vehicle is rapidly becoming unserviceable and showing serious signs of wear and is to be replaced at an early date by a more up to date van on an English built chassis, the necessary expenditure having been authorised by the Council.

The deverminising of all Natives entering municipal employ is being continued. During the year some 1,446 Natives were put through a disinfectant bath, whilst their clothing, blankets, etc. were disinfected by steam.

Manufacture of Disinfectant by Clox Plant.—During the year 4,268 gallons of sodium-hypochlorate were manufactured, the whole of which was used by Municipal departments.

WATER SUPPLY.

No alteration in the sources of supply or in the method of distribution has been made during the year under review.

178 samples of the town water were bacteriologically examined with the following results:—

Main Intake.—34 samples, of which 25 were quite satisfactory, containing no B. coli in 20 c.e.; five samples showed B. coli in 20 c.e.; and four samples showed B. coli in 5 c.e.

New Spring.—35 samples, of which 22 were quite satisfactory; seven showed B. coli in 20 e.c.; and six showed B. coli in 5 e.c.

Military Intake.—30 samples, of which 18 were satisfactory; whilst five showed B. coli in 20 c.c., and six in 5 c.c. or less.

New Intake.—35 samples, of which only one was quite satisfactory; fourteen showed B. coli in 20 c.e., and twenty showed B. coli in 5 c.c. or less.

Findlay Reservoir.—13 samples, of which four were quite satisfactory, whilst nine showed B. coli in 5 c.c. or less.

Muckleneuk Reservoir.—14 samples, of which two were quite satisfactory, four coutained B. coli in 20 c.c. and eight contained B. coli in 5 c.c. or less.

Town Taps.—18 samples, of which two were quite satisfactory; whilst ten contained B. coli in 20 e.e., and six contained B. coli in 5 e.e. or less.

The degree of contamination shown by these analyses is similar to that obtained in the previous year. Whilst the contamination is not of dangerous character it is evident that some of the springs, particularly the "New Intake," are not sufficiently protected. The Government geologists who have been consulted agree with the view put forward in the report for 1924-25 that the contamination is strictly local arising from the ground in the immediate vicinity of the springs.

MILK SUPPLY.

During the year 81 licensed purveyors of milk carried on business in the town.

The dairy premises from which supplies were obtained numbered 158. Of these 81 were situated within the Municipality and 77 were outside the municipal boundary. Of the latter 14 were in Innesdale Municipality and Daspoort. The others are with 16 exceptions, within the twenty mile radius.

The new code of Dairy By-laws referred to in last year's report were only gazetted in August 1927.

Control of Dairies.—The inspection of dairies both within and without the Municipality is earried out by the Dairy Inspector. General supervision is exercised by the Medical Officer of Health and Chief Sanitary Inspector. During the year the Dairy Inspector made 2,348 visits to dairy premises. Certain dairies outside the twenty-mile radius can only be visited once a year.

Following on reports of unsatisfactory conditions found on inspection, or on unsatisfactory bacteriological or chemical analyses 477 notices and letters were addressed to dairymen; 17 prosecutions were instituted and fines amounting to £44, were imposed. Further particulars are given in the report of the Chief Sanitary Inspector.

Bacteriological Examinations of Milk.—The Municipal standard allows not more than 100,000 organisms per c.e. and no B. eoli in 0.1 c.e.

88 samples were examined with the following results:—37 samples were satisfactory in regard to both total number of organisms and number of B. coli. 11 samples were satisfactory as regards total number of organisms but showed an excessive number of B. coli; 11 samples were satisfactory as regards B. coli, but showed a total count above what is permitted by the by-laws. 31 samples were unsatisfactory in both respects. These unsatisfactory samples occurred in every month of the year, and just as frequently in town as in country milk. These 31 samples were obtained from 27 dairies.

The proportion of unsatisfactory samples must not be looked upon as an index of the general purity of the milk supply as samples are taken much more frequently from dairies which are suspected to be producing an impure milk than from those which on inspection appear to be satisfactory.

Chemical Analyses.—149 samples were analysed. In most cases the percentage of fat is well above the standard of 3 per cent. In 14 instances it was below the standard, but with two exceptions only very slightly. On the other hand quite a large proportion of the samples showed non-fatty solids slightly below the standard, though the total solids were well above it. In only one instance was it necessary to institute legal proceedings for the sale of milk adulterated with water.

Ice Cream.—Thirty-nine samples were submitted to bacteriological examination. Seven contained not more than 1,000 organisms per c.c. and with one exception no B. coli in 0.1 e.c. Seven others contained not more than 10,000 organisms and no B. coli in 0.01 c.c. These may be regarded as satisfactory. Of the remaining 25, six had no B. coli in 0.01 c.c. In 16 instances the number of organisms amounted to millions per c.e. with in many cases B. coli in 0.00001 e.e. or less. It has been established that it is quite possible to make a first-class article from pasteurised cream containing less than 1,000 organisms per e.c. and no B. coli in 0.1 c.e. Some of the worst samples were obtained from fashionable tea-rooms. Warnings were issued to the sellers of all unsatisfactory samples, and in nine cases legal proceedings were instituted and fines to the amount of £47.10/- inflicted.

MEAT SUPPLIES.

The Superintendent Inspector at the Abattoirs reports as follows:—

I beg to submit the Report for the year ended 30th June 1927.

Animals Slaughtered:—							!
	Oxen.	Cows.	Bulls.	Calves.	Sheep.	Goats.	Pigs.
1926-1927	17,914	4,489	206	1,970	72,971	2,581	$6,723^{\circ}$
1925-1926	17,101	4,357	169	1,821	67,865	1,180	5,721
)			1926-1927.	1925-1926.	
Total cattle slaugh	htered	****** /***** ******	****** *****	****** ****** *****	22,609	21,627	
Total sheep and go	ats slaug	htered		•••••	75,552	69,045	
Total animals slaug	ghtered		******		106,854	98,214	

The above figures show that 8,640 more animals were slaughtered and inspected than during the previous year.

Carcasses, Organs, etc. Condemned:

	Car- easses.	Qrs.	Plueks.	Livers.	Lungs.	Heads.	Other Organs.
Cattle	192	7	279	718	524	285	490
Sheep and Goats	19	23	1,010	8,347	4,091		_
Pigs	536	_		3	<u> </u>	64	64
Calves	4	—			_		_

Imported Meat Examined:

Cattle.	Sheep.	Pigs.	Pork Loins.	Pork Fillets.
2	44	$64\overline{4}$	607	370 lbs.

Imported Meat Condemned:

9 pig careasses for Measles.

1 pig careass, and 7 heads and tongues for Tubereulosis.

Diseases:-

The percentage of animals condemned for all diseases is as follows:—

Cattle.	Sheep and Goats.	Pigs.
0.084	0.025	7.972

Tuberculosis.—Amongst **Cattle** there were 43 eases in all, of which 29 eases were generalised and the eareasses were condemned. 14 were localised eases. The percentage of eareasses showing Tubercular lesions was 0.019.

Amongst **Pigs** there were 106 cases of which number 48 were generalised cases and eon-demned. The percentage showing Tubercular lesions was 1.575.

Measles.—Amongst Cattle there were 295 cases of which number 95 were condemned and 200 were detained for 12 weeks freezing. The percentage of cattle showing measles was 1.304.

Amongst **Pigs** there were 483 eases, all were condemned. The percentage of pigs showing measles was 7.184.

The following is a list of animals condemned for causes stated:-

Septicaemia:—3 calves, 3 pigs, 2 cows, 1 ox.

Pyaemia:—1 ealf.

Jaundice:—7 sheep, 1 pig.

Fever and Defective Bleeding:—2 sheep, 1 goat.

Emaciation:—4 eows, 1 ox.

Decomposed:—18 ox offals.

Septie Peritonitis:—1 sheep.

Moribund:—2 eows, 2 sheep, 1 pig.

Local Absesses:—2 fores of mutton.

Poison:-5 oxen.

Aetinomycosis:—20 eases.

Putrefaction: 3 calves, 1 ox.

Extensive Bruising:—542 lbs. beef, 1 pig, 18 lbs. pork, 15 lbs. mutton.

Lymphadenitis: -50 eases of which 1 sheep and 18 fore-quarters of mutton were condemned.

Butcher shops were visited at regular intervals throughout the year, in order to prevent the sale of imported meat before inspection.

Bakers and Confectioners:-

At the close of the year there were 28 lieensed bakeries in town and one in the Asiatie Bazaar. All the bakeries are now provided with mechanical dough mixers. Generally a good standard of cleanliness has been maintained and each bakery has attached to it a suitable dressing room with lavatory basin, soap and towels. Oceasions arose where structural repairs were necessary, or recolourwashing or repainting, repairs to flyproofing, etc., and notices served to remedy these contraventions of the by-laws were in all cases complied with. Early morning street inspections of delivery carts and methods were continued and all irregularities discovered were dealt with.

Butcheries:-

There are 49 licensed butcher's shops in town and 13 in the Asiatic Bazaar and Native Locations. The premises are all of flyproof construction and are provided with cleansing facilities for the employees. On the whole they are well maintained. Several successful prosecutions were taken in connection with dirty receptacles used for conveyance of meat, insufficient covering and non-wearing of overalls by employees handling meat.

Restaurants, etc.:—

In town there are 13 licensed hotels, 30 restaurants, 59 tea-rooms, 5 native cating-houses and 2 bioscope tea-rooms. In the Asiatic Bazaar and Native Locations there are 3 native eating-houses, 30 tea-rooms, 36 grocers, 32 fruiterers and 350 hawkers and pedlars.

The clean handling of foodstuffs and utensils in hotels, restaurants, etc, has again been carefully supervised. Special inspections have been made of the kitchens of these places during lunch and dinner hours, and the attention of the proprietors drawn to any unsatisfactory conditions found, such as the personal cleanliness and the wearing of overalls by employees, fingering of foodstuffs on plates, protection of foodstuffs, dirty dish drying cloths, dirty dish washing water, insufficient supply of hot water, etc. The improvement resulting from these inspections has been very satisfactory. The protection from flics and dust of sweets and foodstuffs in shops has also been dealt with, and improvement effected.

No advance has been made in the provision of better storage accommodation for fruit and vegetables hawked by Indians. The present system of keeping these articles in sack covered trolleys or in structurally defective wood and iron storerooms in yards of residential stands in the Asiatic Bazaar is far from satisfactory. A test prosecution was taken before the Magistrate and the hawker fined, but on appeal the conviction was quashed, the Conrt being of opinion that the meaning of the word "storage" as used in our local by-laws, did not cover the keeping of vegetables, etc. in a cart overnight. The matter was about to be taken further on the question of license but before the proceedings could be commenced the licenses were issued by the Licensing Officer.

Boarding and Lodginghouses:-

The number of these premises licensed during the year was 147. All are well maintained and frequently inspected. At the larger places suitable washing accommodation for native employees has been provided.

Laundries:-

There are in town 8 laundry businesses, of which 2 are conducted by Chinese.

In the Asiatic Bazaar there are 11 laundries conducted by Indians and all washing connected with these premises is done in the Municipal Wash-house. On the whole these businesses were fairly well maintained but in the case of several Indians it was found necessary to prosecute to maintain an improved standard of cleanliness.

Altogether 52 people are licensed to earry on washing business, of whom 44 reside in the Locations. A number of the latter wash at the Municipal Wash-house and at public wash-stands in the Native Locations.

Sewerage and Drainage:—

21/4 miles of sewer and 41/4 miles of storm water drains have been laid during the year.

The water-carriage system of house drainage has been installed in a further 731 dwelling houses and 67 business premises. The total number of premises on the water-carriage system at 30th June 1927 was 5,290.

Conservancy System:—

At the 30th June 1927 5,871 stercus removal services were being carried out, 412 of these being daily services and the others alternate day services. The number shows a small increase of 51 services over last year's figures. The total number of premises concerned is 4,063 of which 1,267 are in the Locations and 2,796 in the European suburbs. The large amount of building which has taken place in the outlying portions of the municipality accounts for the increase in services in spite of continual extension of the water-carriage drainage system. The continued existence of the conservancy system on a large scale in the locations is a serious menace to the health of the coloured population.

Refuse Removal Service:-

The system of collection remains the same. About 170 tons were collected daily. Of this some 150 tons were dumped at various places on the town lands and outskirts of the town. About 20 tons were dealt with by the pulverisor. The eost of collection is 2/8d. per ton. It has not been possible so far to estimate the cost of pulverising. After pulverisation the product is sold at 6/3d. per ton including cartage.

Manure Removal Service:-

There has been no alteration in arrangements with regard to collection and disposal of manure.

The service is earried out without charge from 200 premises.

The amount dealt with was 5,500 tons. The total cost of collection amounted to £1,350 for the year whilst revenue from sale of manure and fertiliser produced at pulverisor amounted to £408.

SEWAGE DISPOSAL WORKS.

The Manager (Mr. M. Lundie) reports as follows:—

Volume of Sewage.—The volume of sewage delivered at the works for the year amounted to 507,334,000 gallons. The maximum volume for 24 hours was 2,451,000 gallons on the 27th February, 1927 and the minimum 821,000 gallons on the 27th January 1927.

The daily average for the year amounts to 1,389,945 gallons.

The maximum monthly flow was 49,234,000 gallons in November 1926 equivalent to a daily average of 1,641,133 gallons. The minimum monthly flow was 31,931,000 gallons in December 1926 equivalent to a daily average of 1,030,032 gallons.

Volume of Water over Daspoort Weir.—This represents water from Aapies, Steenhoven and Skinner Spruits together with effluent from the works. The total volume registered for the year amounted to 1946,720,560 gallons which is equivalent to a daily average throughout the year of 5,333,480 gallons. The maximum monthly flow was 271,917,072 gallons in February equal to a daily average of 9,711,324 gallons. The minimum monthly flow was 89,936,280 gallons in June equal to a daily average of 2,997,876 gallons. The maximum daily flow was 63,471,000 gallons on the 25th November. The minimum daily flow was 1,258,000 gallons on the 2nd July.

The above figures show a considerable drop when compared with last year (admittedly also a dry year). The drop becomes more pronounced when comparison is made with previous more or less normal years.

The averages and ratios of dilution therefore compare very unfavourably with previous years.

Ratio of Dilution of Effluent to Stream Water at Daspoort Weir:—The maximum ratio of dilution of effluent to stream water was 1:6.2 in February.

The minimum ratio of dilution of effluent to stream water was 1:1.6 in June.

The mean ratio of dilution of effluent to stream water for the year was 1:2.8.

Rate of Filtration:—The average rate of filtration by the 16 circular filters was 155.4 gallons per square yard per diem or 77.7 gallons per cubic yard per diem.

Under working conditions with one filter in every set of four as a standby the rate then becomes 207.2 gallons per square yard per diem or 103.6 gallons per cubic yard per diem.

Rainfall.—The total rainfall registered at the works for the year amounted to 18.49 inches, this being half the total registered for the year ending June 20th 1925. The maximum fall was 5.77 inches in November. No rainfall being registered for five months in July, August, April, May, June. This abnormal dry season naturally had a very depressing effect on the quality and yields of farm crops.

ANALYTICAL RESULTS:

The following table gives the maximum, minimum and mean figures of analytical determinations made during the year.

Puri- fication	per cent.	91.4	93.5	92.0	1	1		Ç	90.0	90.5	94.1	
ent. Mean.		6.7	99.0	0.26	90.0	2.19	8.9		0.59	1.4	3.4	
Final Effluent. Min. M		4.8	0.4	0.175	0.55	1.53	5.4	1	0.55	1.2	2.11	Passes
Max.		8.8	0.95	0.325	80.0	2.87	8.8	1	0.73	1.7	5.8	
Sewage after sedimentation. Iax. Min.		17.6	3.8	0.93	nil	nil	7.1		1.87	4.7	18.9	
ge after s Min.		14.8	2.8	9.0	nil	nil	5.6		1.6	4.2	10.6	Fails
Sewa Max.		22.0	4.4	1.6	nil	nil	8.8		2.5	5.5	25.8	
nentation. Mean.		78.0	10.2	3.25	nil	nil	10.7		5.0 8.0	14.8	58.9	
Sewage before sedimentation Max. Min. Mean.		52.0	6.0	2.5	· nil	nil	6.8		3.0	9.8	42.3	Fails
wage be Max.		148.8	13.0	4.5	nil	nil	12.8		6.1	18.0	79.0	
Parts per 100,000. Se		Suspended Solids	Free and Saline Ammonia as Nitrogen	Albumenoid Amnonia as Nitrogen	Nitrous Nitrooph	Nitrie Nitropell	Chlorine	Oxygen consumed from N/80 Permanganate	in 3 mins.	in 4 hours in 4	Dissolved Oxygen absorbed in 5 days at 18.30° C.	Incubator Test

The last three analytical determinations in the above table for final effluent free of suspended solids gave the following mean figures 0.29, 0.76 and 0.89 respectively, corresponding to a percentage purification of 95.0, 94.8, and 98.5 respectively. In other words this means that it is possible by suitable means to further purify the final effluent to the extent of 50.8, 45.7 and 73.8 per cent. respectively. tively. The figures in the table above show that the various sections of the purification works are functioning satisfactorily and that under the circumstances a well oxidised and stable effluent is being produced.

The marked increase in nitrates is a satisfactory feature. The final effluent still shews a rather high figure for suspended solids. This is likely to remain so long as Abattoir sludge is being discharged down the sewer, and also to the fact that the filters are working at their maximum capacity. Until such time as Abattoir sludge, which contains a high percentage of fine matter, is disposed of elsewhere it is hardly possible to produce a better effluent. However, it is satisfactory to note that in each case the percentage purification obtained has increased.

Plant.—The usual routine attention has been given to the following:—sedimentation tanks, automatic supply tanks and valves, recorders, sprinklers, all sprinklers supplied with new ball races, filters, sludge tanks, haulage gear, effluent channels, etc, to ensure efficient and smooth running of the plant.

Sludge.—The usual large quantity of sludge has been produced and is being got rid of gradually. The problem of disposal is now difficult owing to the fact that local authorities are debarring farmers and gardeners from using this class of manure. Numerous reports have been submitted from time to time with reference to the disposal of sludge, present and future, and it is presumed steps have been taken to relieve the congestion at the works.

Farm.—Labour has been expended on the manifold operations associated with the sewage works and plant and the raising, reaping and disposal of fodder crops. The latter from a commercial point of view being now confined to lucerne, mangels and barley.

Expenditure and Revenue:-

Expenditure on Sewage Works		8
Expenditure on Sewage Farm	1,859 2 £1,299 16	
TOTAL	£3,158 19	2
Revenue from Sales of Farm Produce	£2,168 10	5

This represents an increase in Revenue of £496–13s. 8d. over the year ending 30th June, 1926.

Cost of disposal per Million Gallons.—The cost of disposal per million gallons works out at £1 19s. 1d.

Analyses: Health Department.—The number of samples analysed for this Department amounted to 169. These comprise milks, waters, coffees, butters, peppers and fruit drinks.

ANTI-RAT MEASURES.

Work carried out for year ended 30th June, 1927.

New impervious floors laid in grain, flour, forage and other stores	29
Floors repaired or walls or roofs made ratproof in flour, grain or forage stores	66
Non-ratproof grain, forage or other stores disused	ΰ.
Non-ratproof grain, forage or other stores demolished	14
Accumulations of rubbish or lumber likely to harbour rats cleaned up or removed	249
European dwelling houses: Foundations repaired, floor gratings replaced or rat holes	
stopped	124
Native rooms: Floors relaid or repaired	49
Ratproof animal food bins provided at private stables, etc	28
Premises inspected or re-inspected and advice given where necessary	2,712
Notices or intimations to owners or occupiers of premises to use traps or poison	516
Approximate number of rats destroyed on private premises (excluding Government	
properties)	1,277
Number of rats trapped on Municipal properties	1,322
	7,941
Number of baits taken	3,221
Number of animals found under suspicious circumstances and examined by Bacteriol-	
ogist ogist	
Number of prosecutions for failure to comply with Regulations	4

Remarks.—A Municipal rateateher was appointed on 6th January, 1927 for work on Municipal lands and properties. He is not employed on private premises except where it is suspected precautionary measures are being neglected.

HOUSING.

In accordance with Section 131 of the Public Health Act, 1919, the following special report on "overcrowding and bad or insufficient housing" is submitted.

European Housing:-

No case of overcrowding as legally defined was discovered during the year.

As regards unsatisfactory housing there is still a certain amount including a few buildings which are unfit for habitation owing to structural defects, and other dwelling houses, which whilst adequate for one family are unsatisfactory when occupied by several as is now the ease in a number. The remedy for this state of affairs is twofold, viz: the closing and demolition of unhygical premises, and the crection of new houses which can be let at such rentals as the people concerned can afford to pay.

Houses Closed by Magistrate's Order.—During the year only three houses oecupied by Europeans have been closed. These houses comprised nine rooms and kitchens. Of these houses one and part of another have been demolished.

A demolition order was also granted for three other rooms previously elosed by Magistrate's order.

Erection of New Dwelling Houses.—357 dwelling houses were completed during the year. These comprise:—

Houses of 3 rooms or less	(excluding kitchen)	******	 	 156
Houses of 4 rooms	do.		 	 113
Houses of 5 rooms	do.	¿	 	 47
Houses of 6 rooms	do.		 	 20
Houses of 7 rooms	do.		 	 7
Houses of 8 rooms or more	do.		 	 14

In addition to dwelling houses 267 other new buildings were ereeted: and in 294 instances alterations or additions to existing buildings were carried out.

The various new buildings and erections were in the following districts:-

Distriet.	New Dwellings.	Additions
Pretoria Central	70	160
Pretoria West	67	79
Sunnyside	66	86
Arcadia	68	87
Hatfield	42	36
Riviera	11	17
Muckleneuk	32	17
Brooklyn	27	21
Good Hope	4	6
Trevenna	2	4

Under the Municipal Loan Scheme 42 houses were erected during the year at a cost of £41.400. All these were under the individual loan system. No houses were built by the Council.

Locations, and Housing of Coloured Persons.—

Natives.—Approximately half of the Native population is resident in the Locations and in large compounds, e.g. Municipal, Railway and Groenkloof. The other half reside on their employers' premises in the European quarters of the Town. At the Census in 1921, the total Native population was 19,361, and it does not appear that there has been any marked increase. There are between 7,000 and 8,000 Natives living in the Locations which comprise Marabastad, Bantule and Schoolplaats.

Whilst in Bantule the majority of the houses are substantially built of concrete, in Marabastad, with few exceptions, wood and iron structures prevail, whilst in Schoolplaats green brick and frequently thatched roofs are found. The type of house in Marabastad has been greatly improved in recent years and a considerable proportion of the houses are well

constructed and maintained. The reduction in the number of houses in this location consequent on the transference of nearly half the population to Bantule, has also greatly improved the amenity of this location.

In all the locations the general standard of sanitation would be improved by the introduction of water-carriage drainage, improved roads, and better scavenging and refuse removal.

Houses in Locations Closed and Demolished.

Marabastad.—(The total number of houses in this Location is 390. Number of persons per house = 8.5). 31 rooms and 1 shop were closed by Magistrate's Order. Four of these rooms have since been demolished.

A demolition order was also granted for four rooms: of these two were demolished and the others reconstructed.

Cape Location.—(Total number of houses is 168. Persons per house = 7.1). Four rooms were closed by Magistrate's Order and were demolished.

Schoolplaats.—(Total number of houses in this location is 148 and the number of persons per house = 7.5).

Asiatic Bazaar.—41 rooms and 12 shops, storerooms, etc., were closed by Magistrate's Order. Of these 17 rooms and 3 shops have been demolished; 12 rooms and 6 shops are standing empty; 5 rooms and 2 shops have been repaired and 7 rooms and 1 shop have been reconstructed.

Demolition Orders were also granted for 7 rooms on three stands. These have all been demolished and buildings reconstructed.

The Asiatic Bazaar is now the most insanitary of all the locations, and as shown above particular attention has been paid to the reconstruction of houses in this area. Every effort is made to secure a better class of building—of briek where possible. Funds for the sewering of the whole of this location have now been allocated, and it is hoped that this urgently required work will shortly be put in hand.

Altogether 18 new houses have been erected in the different locations and in 26 others additions have been made.

Bantule.—There are 246 Municipal concrete houses in this Location and 145 privately owned wood and iron houses, making a total of 391. The number of persons per house = 7.5

WORK DONE BY SANITARY INSPECTORS FOR THE YEAR ENDED 30th JUNE, 1927.

The work carried out by the Sanitary Inspectors is detailed in the following figures:

Total inspections made	49,835
House to house inspections	13,912
Early morning inspections	1,539
Night inspections	88
Infectious disease visits	3,203
Inspections of special businesses and trades	16,333
Complaints received	989
Nuisanees dealt with	8,298
Nuisances abated	8,065
Written notices issued for abatement of nuisances	3,439
Verbal intimations given for abatement of nuisances	5,073
Notices served for removal of noxious weeds	86
Samples of foodstuffs taken for analysis	314
Samples of water taken for analysis	193
Special Inspections:—	
Morning Market	Daily
Butchers' Shops	$1,\!265$
Fishmongers' Shops	205
Hotels, Restaurants, etc	2,221
Bakehouses	503
Dairies	2,348
Cow and other stables	3,876
Fruit and other food stores	3,037
Laundries and washing places	278

		100
	Mineral water and ice-cream factories	
	Kaffir eating houses	211
	Hairdressers' saloons	323
	Miseellaneous	1,880
	Applications for licences approved—new	847
	Applications for licences approved—renewals	1,145
	Applications for lieenees refused	49
Diginf	ections, etc.:—	
DISIIII	eonons, euc—	
	Patients removed to Hospital	46
	Contacts removed for segregation	10
	Houses disinfeeted	201
	Steam disinfections	214
	Natives Disinfested	1,446
A4: -T		
Aruci	es Disinfected by Steam:—	
	Mattresses	234
	Pillows	384
	Blankets	404
	Sheets	86
	Miseellaneous	4,162
		-, - 0 -
Matte	rs Referred to other Departments:—	
A. 7	Fown Engineer:—	
		29
	Broken or missing U.T. gratings	_
	Broken or missing access caps on waste pipes	30
	Broken W.C. Basins	11
	Broken drain gullies and grease traps	6
	Broken and leaky water taps	323
	Broken and leaky water pipes	76
	Broken and leaky stopcoeks	39
	Broken or loose ventilating pipes	18
	Broken street furrow eoverings	. 5
	Choked drains	61
	Choked W.C.s	24
	Choked bath and sink wastes	13
	Buildings ereeted or altered without permission	97
	Buildings occupied without permission	16
	Dangerous buildings	10
	Dead animals on streets, etc	38
	Defective W.C. and urinal flush cisterns	278
	Defective or broken bath and sink wastes	49
	Dirty or defective street furrows	27
	Defective flush pipe connections to W.C. basins	6
	Absence of through ventilation in new buildings buildings	4
	Accumulations of rubbish on Municipal properties	10
	Defective or broken manholes and covers	2
	Defective overflow pipes from cisterns	3
	Sanitary buckets left on sewered premises	6
	Stables not commeeted to sewerage	3
	Baths, sinks and wash-hand basins not connected to sewer	15
	Dangerous holes in footpaths	$\frac{6}{6}$
	Defective sewerage connections	5
	Road surface water flowing on to private property	2
	Defective structure of municipal latriues	2
	Rubbish, sanitary or manure removal services not satisfactorily earried	
	out	8
	Erection of brick kilus encroaching on street	j
	Leaky connections of soil pipes to W.C. basins	6
	Absence of native W.Cs. at newly-sewered premises	9
	Dirty eondition of municipal latrines	7
	Growth of noxious weeds on streets, etc	24
	Leaky verandah roof and guttering over foot pavement	2
	Outbuildings converted into living rooms	4
	Dirty condition of public outspans prints condition of municipal native eating house	2
	THE V CHILD HAD BEEN THE THE TOTAL TRAINING ASTRONOMY HADISA	-,

B. Licence Inspector:—	
Unlicensed boarding houses	
Unlicensed lodging houses	
Unlicensed cow stables	
Unlicensed milk sellers	
Unlicensed cow keepers	
Unlicensed fruuiterers	
Unlicensed grocers and general dealers	
Unlicensed goat keepers	<u> </u>
Unlicensed tea rooms	
Unlicensed kaffir eating houses	
Unlicensed laundries and washing places	
Unlicensed hairdressers' saloons	
Unlicensed fish frying business h	
Unlicensed bakery and confectionery by Unlicensed butchery	
Unlicensed butter hawkers	
Unlicensed brick burner	
C. Location Superintendent:—	·
Erection of unsuitable building	
Growth of noxious weeds on streets	
Buildings erected or altered without pe	ermission
D. Chief Officer, Fire Brigade:-	
Dangerous accumulation of inflammable	material 11
	material 1.
E. Tramways Manager:—	
Foul condition of conveniences at tram	sheds 2
F. Manager, Electric Supply Department:	
Foul condition of temporary latrines	
Growth of noxious weeds at New Power	Station
Foodstuffs condemned:—	
r constants condended.—	1 Case of Biltong.
3 Buck.	1 Case of Diffong.
	6 Tins Tinned Meat.
1 Lieg of Buck.	6 Tins Tinned Meat. 24 Tins Jam.
1 Leg of Buck. 3 Guinea Fōwls.	6 Tins Tinned Meat. 24 Tins Jam. 252 Lbs. Butter.
8	24 Tins Jam.
3 Guinea Fōwls.	24 Tins Jam. 252 Lbs. Butter.
3 Guinea Fōwls. 2 Hares.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws.
3 Guinea Fōwls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums.
3 Guinea Fōwls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears.
3 Guinea Fowls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish. 14 Jars Fish and Meat Pastes.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears. 1 Box of Avocada Pears.
3 Guinea Fowls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish. 14 Jars Fish and Meat Pastes. 29 Bags of Potatoes.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears. 1 Box of Avocada Pears. 15 Pockets of Marrows.
3 Guinea Fowls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish. 14 Jars Fish and Meat Pastes. 29 Bags of Potatoes. 16 Bags of Dried Peaches.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears. 1 Box of Avocada Pears. 15 Pockets of Marrows. 3 Pockets of Beans.
3 Guinea Fowls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish. 14 Jars Fish and Meat Pastes. 29 Bags of Potatoes. 16 Bags of Dried Peaches. 118 Bags of Cabbages.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears. 1 Box of Avocada Pears. 15 Pockets of Marrows. 3 Pockets of Beans. 14 Pockets of Lemons.
3 Guinea Fowls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish. 14 Jars Fish and Meat Pastes. 29 Bags of Potatoes. 16 Bags of Dried Peaches. 118 Bags of Cabbages. 2 Bags of Biltong.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears. 1 Box of Avocada Pears. 15 Pockets of Marrows. 3 Pockets of Beans. 14 Pockets of Lemons. 21 Baskets of Plums.
3 Guinea Fowls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish. 14 Jars Fish and Meat Pastes. 29 Bags of Potatoes. 16 Bags of Dried Peaches. 118 Bags of Cabbages. 2 Bags of Biltong. 1 Bag of Peas.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears. 1 Box of Avocada Pears. 15 Pockets of Marrows. 3 Pockets of Beans. 14 Pockets of Lemons. 21 Baskets of Plums. 4 Boxes of Cucumbers.
3 Guinea Fowls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish. 14 Jars Fish and Meat Pastes. 29 Bags of Potatoes. 16 Bags of Dried Peaches. 118 Bags of Cabbages. 2 Bags of Biltong. 1 Bag of Peas. 3 Bags of Beans.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears. 1 Box of Avocada Pears. 15 Pockets of Marrows. 3 Pockets of Beans. 14 Pockets of Lemons. 21 Baskets of Plums. 4 Boxes of Cucumbers. 3 Boxes of Bananas.
3 Guinea Fowls. 2 Hares. 20 Dressed Fowls. 1,319 Lbs. Fish. 2 Barrels Salt Herrings. 5,607 Tins Assorted Fish. 14 Jars Fish and Meat Pastes. 29 Bags of Potatoes. 16 Bags of Dried Peaches. 118 Bags of Cabbages. 2 Bags of Biltong. 1 Bag of Peas.	24 Tins Jam. 252 Lbs. Butter. 166½ Lbs. Cheese. 20 Boxes of Tomatoes. 1 Box of Pawpaws. 18 Boxes of Plums. 38 Boxes of Pears. 1 Box of Avocada Pears. 15 Pockets of Marrows. 3 Pockets of Beans. 14 Pockets of Lemons. 21 Baskets of Plums. 4 Boxes of Cucumbers.

PROSECUTIONS.

The following cases were taken before the Magistrate:-

OFFENCE.	No. of	No. of	No. Dis-	Total Fines.
02 2 22,102	Cases.	eonvie-	charged.	Imposed.
Contraventions of Dairy By-Laws:-	O Caroos.	tions.	o m agoa,	
Sale of milk not up to baeterial standard	16	16		£41 0 0
Sale of milk not up to chemical standard		1	_	3 0 0
Sale of milk in Town without Licence		1		1 0 0
Dirty cowshed and surroundings		1		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Cows not eleaned before milking, milker		*		
not wearing overalls and not washing				
hands before milking		5		19 0 0
Dirty eoudition of milk depot		$\overset{\circ}{2}$		10 0 0
Transferring milk from one receptacle t		4		10 0 0
another on street		3		4 10 Ü
Leaving open and unprotected bottles of		•		1 10 0
milk on street		1	_	1 0 0
Dirty clothing worn by delivery native		1		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Sale of ice-eream not up to standard		9		47 10 0
Sale of unsound meat		. 1		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Sale of flour unfit for consumption		1		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Sale of adulterated pepper		1		5 0 0
Sale of adulterated pepper	1	1		5 0 0
Sale of sprouted grain		1		1,00
Exposing for sale meat not inspected and	I	1		1, ,0 0
stamped at Abattoirs		1		1 0 0
Exposing for sale unsound butter			1	
Exposing for sale unsound fruit		1		$\frac{-}{2} \frac{-}{0} \frac{-}{0}$
Depositing vegetables intended for sale in			_	2 0 0
street gutter		3		3 0 0
Failure to properly store vegetables intended		J	_	3 0 0
for sale		3		8 0 0
Failure to properly store grain in rat-proo		Ü		0 0 0
•		1~		1 0 0
Conveying vegetables intended for sale in un	". <u> </u>	*		1 0 0
suitable manner		1 '	1	5 0 0
Hawking meat without lieence		1		$\frac{3}{2} + 0 + 0$
Delivering meat under dirty conditions		4		7 0 0
Storage of soft goods intended for sale unde		- · T -	1	
dirty conditions and in room connected with				
bedroom	, _	2	_	4 0 0
Disrepair of dwellinghouses		1		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Dirty laundry premises	2	$\overset{\cdot}{2}$		10 0 0
Dirty eondition of premises		$\frac{2}{2}$		4 0 0
Dirty condition of yard, stables, etc		$\frac{2}{3}$	-	10 0 0
Failure to provide dough mixing machinery in		· ·		
bakery		1		10 0 0
Defeetive structure of temporary building				
latrine	-	2		1 10 0
Absence of proper drainage		$\frac{2}{2}$	_	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Housing unexempted natives in Town		. 1	_	$\stackrel{\circ}{3}$ $\stackrel{\circ}{0}$ $\stackrel{\circ}{0}$
Housing natives in unsuitable premises		$\hat{\bar{3}}$	1	13 0 0
Breeding of flies		6		11 0 0
OZ ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ		_	_	
TOTALS	88	85	3	£249 10 0

BIRTHS-All Races-in the Municipality for the Year ended June 30th, 1927.

Table No. 1.

	EU	EUROPEAN	AN.			NATIVE	国		lei	EURAFRI	CAN.			ASIATIC	IIC.	
	Legitimate	je.	Illegitin	nate.	Legitimat	e.	Illegitin	nate.	Legitin	nate.	Illegitin	nate.	Legitin	mate.	Illegitin	nate.
	M.	표.	M.	E.	M.	F.	M.	H.	M.	Œ	M.		M	Œ.	M	<u>[</u> *
1926 July		33	П	2	11	11	2	7.0	2	~	6	· -	6	. 6		
August	. 37	28	-	1	11	က	5	, ro	ر ا	। ac	। ० ०	H 673	1 4	1 4	j	۱
September		55	2	2	00	က	2	2	2	2	·	,	ا م	1 6	İ	
October		36	2	70	∞	6	4	က	1	9	೧೦	1	000	ı 4	l	J
November		34		1		7	က	-	c c	2	, 1	1	۱	٠,-	-	j
December	51	33	2	-	9	11	ಸರ	9	·	ı 	J	,	1 4	¹	۱	
.927 January	36	37	4		00	0	ro	, cc	2	6	1	'	+ -	۲.		
February	29	29	1	2	,	10	7	, cc	ı 67	ו גמ	ļ	}	4 4) C	ļ ,	-
March	. 31	36	-	2		∞	. cc	2	ı 67	o &	6	6	H AC	ء د د		
April	35	33	1			6) 	7	۱	, ,	1	1 0.	. C.	א כ		-
May	38	30	က			0.01	110	. 10	,	·cc:		1	1 4	୍ଦି କ		-
June	39	40	4	2	10	2	2	· ∞	·	, 1	2	·	H 673	ာ ကေ		۱ ا
Totals	. 423 45	424	21	19	105	88	52	50	19	28	12	10	35	38	2	1 4

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BIRTHS TO NON-RESIDENTS. ROPEAN. COLOURED. Females Moles Females		(CO +	r	T	1 .	01,	~		1	1	9 5
BIRTHS TO BEUROPEAN. Females	oc oc) [-	တ ဝ	o 4	10	ro (n o	, 0	· ∞	12	86
EUR Males	īc	6	133	4	9	12	- ود	2	4	10	06
COLOURED.	-	'		ကေ မ	ı	ਚਾ ਪ	ə 4 1	4	2	23	27
HS.	7	L - 0	A) 60	4	1 '	מס צנ	. c1	1	2	1	32
STILLBIRT EUROPEAN. Hes. Females.	1	Π	01	1		ا <i>د</i>	۱		c)	67	13
EUR Males.		1			9	න හැ	। ला	1	1	က	12
	1926 July	August	October	November	December	February February		April	May	June	Totals

DEATHS OF EUROPEAN CHILDREN under 5 years within the Municipality for the Year endea June 30th, 1927.

Table No. 2.

Total Total	under 1—5 under year. years. years. M. F. M. F. M. F.	1	24 19 6 6 30 25
	10—11 11—12 months. 1 M. F. M. F.		- 1 1
	7—8 8—9 9—10 months. months. M. F. M. F. M. F.		1 1 1 1 1 -
	5—6 6—7 months. months. M. F. M. F.		1 1 _
	0—1 1—2 2—3 3—4 4—5 months. months. months. months. months. M. F. M. F. M. F. M. F. M. F. M. F.		2 2 1 1 1 -
	0—1 1—2 months. months. mo M. F. M. F. M		15 12 1 —
	Cause of Death.	Whooping Cough	

INFANTILE MORTALITY: EUROPEANS: Causation and Incidence in Districts, for Year ended June 30th, 1927.

ths.	Total.	95.89	91.84	36.14	63.49	52.63	43.47		86.96	21.05	39.47	1	23.18	99.99	1	1	48.48
Mortality ra per 1,000 bir	Females.	93.75	60.00	25.00	64.51	62.50	43.01	1	90.90	20.00	31.25	1	55.55	1	1	1	42.88
Morts per 1,	Males.]	97.56	125.00	46.51	62.50	45.45	44.12	1	83.33	22.22	45.45]]	125.00	1	1	54.05
Total births.	덛	32	20	40	31	16	93	11	22	20	32	11	18	7	ರ	25	443
T. q	M.	41	48	43	32	22	89	6	24	45	44	10	56	∞	70	19	444
Total deaths.	됸	က	က		2	 -	4	1	2	Н		1	-	1		1	19
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Other liseases.	压		23		1	1	1	1	1	1	1	1	1	1]	1	3
ras-	M.	-	1]	1	1	1	1	-	1	1	1	1	1	1	1	2
Ma mus.	M. F.	1]	1]]]	1	1	1	1]	1	1	1	1	
Convul- sions.	드	1	1	1	1	1	1	1	1		1	1	1	1	1	1	
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500	E	1	1	1	1	1	1	1	1]	1	1	1	1	1	1	
Congenital Causes.	. M.	1	1		21	1	2		2	1	-	1		1	1		10
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	į	Central	Central	Central	Central		St. D.	rris	erve		Pioto	nain	3 115:1	10 mil	A dilli		
	}	West	West	Fast	Frast	nope	12 We	e alle	y Kes	erae	d	a and		уш ан Г ² 22011	Tuenn	2 116	
	:	North West	Nonth	Contl	Contin	Dungton	Defend	Detelli	Kallway Keserve	Amode	Rivion	Trotte	Racifold Itsiloner	Non IC	Robonts Hoiselve	TAGGAT	

DEATHS OF EUROPEANS within the Municipality for the Year ended June 30th, 1927. Age Incidence.

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	Total: Males. Females	1 1	ıc	-		-	₩ -	- ۲	٠ <u>-</u>	-	2	, - 1	0	۔ ہ	†·	-	-1	16	01
over	years. I. F. M		က	1					-	1	1	1		1	1			-	J.
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65—75	years. M. F.		1	-					1 10		- 2						-	- C	و م
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55—65	years. M. F							1	C	'	p	1		¸	1		- -		n
-55	years. M. F.		ļ ,	1		-	-	1	ا ه	1	1	1		1				9	21
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35—45	years. M. F.	·-·	1 1			'	1 2		-	- 		1 1	7	- -	,- 	_ 	1	"	1 2
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25—38	years. M.	1	1 1				1			-	1	1	1	9	27	1			_
-25	š. Ed	-	-	1		'					-1	1	1	l			(27 (21
20—25	years. M.	1	-			1	1		,		1					1		(C 1
15—20	rs. F.				1	1					1	ſ	1	1				1	1
15.	years.					1					1	1	1		1		-	1	,
10—15	years M. F.	1				1	1			1 3	3			1				1	1
1	M.					1		1			1	1	1			1			
5—10	years. M. F.	1				1							1				1		
5	M						'			•		 							
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	1.				Meningitis						active			Cord	12ge	Insane			eart
	Cause of death.	er			ul Me			terica	ection		cver,			pinal	morr	of the Insane	nation		the Heart
	use of	1 Fev	feve.	ery	7 00000	50	ulosis	Mesen	it inf	1	aric 1		alitis	of S	ul Hae	is of	Alier	Y	of
	Сал	Typhoic	Scarlet	Dysent	Leprosy	Tetanu	Tubere	Tabes	Purule	Cancer	Dishote	Anaemi	Enceph	Disease	Cerebra	Paralysis of the Insa	Mental	Epilepsy	Disease

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Diseases of Embolism Bronchitis Bronchitis Bronchitis Bronchitis — Congestion Asthma Disease of Ulcer of Sturentoea Appendiciti Intestinal Cirrhosis of Nephritis Disease of Salpingitis Puerperal Puerperal Puerperal Facute Absorbisease of Schiitty, Olsease of Salpingitis Puerperal Facute Absorbisease of Schiitty, Olsease of Schiitty	
Diseases of the Arter Embolism and Thron Bronchitis	

DEATHS OF NATIVES within the Municipality for the Year ended June 30th, 1927.

Age Incidence.

Total.	Fem	m —		€1 -	- 1	-	'	4	1 60	_		1		'	1	-		· -]	
T	Males.	٠. د		₩ 6	7	٦		1 =		'	2	2	1	-	-	.	6	1 (10
over 75 years.	M. F.			1		1 1			1	-	1					1			
65—75 years.	M. F.	1		1						1	1	1		-				ç	1
55—65 years.	M. F.			-						1	6		-	1				-	;
45—55 vears.	M. F.	-		27	 	1		-				-	1					-	- ∤•
35—45 vears.	M. F.	1		1			1	 	11 		 							c	7
25—35 vears.	M. F.	2	1	-	1		1	°								-	- 	+	† 6
20—25 vears	M. F.			1	1	1	1		7					1	 				1
15—20	M. F.	 သ		2 - 2		1			-	- 					 •				K
10—15 vears	years. M. F.	1 1			1			1	1	 	1	1]		 -		 		1
5—10 10—15	years. M. F.	1] -	-	1	1		1	1			 	1			
1-5	years. M. F.	1	1		1	1	1	1								-	1	1	F
01	years. M. F.	1	-	-		1	1		'	7				1	1	1	1	2	-
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		***************************************		u			Meningi	orum	:		tumour			rrhage	insane				of the heart
		l Fever		ng coug za	ry	las	ococcal	s Neonat	ılosis	· · · · · · · · · · · · · · · · · · ·	alignant	ism	itis	al haeme	is of the	Mania	y	sions	s of the
		Typhoic	Measles	Whooping cough	Dysente	Erysipe	Mening	Trismus	Tuberer	Syphilis	Non m	Alcohol	Mening	Cerebra	Paralys	Acute 1	Epileps	Convuls	Diseases

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the larynx ————————————————————————————————————	
Diseases of the larynx Bronchitis	

EATHS OF COLOURED PERSONS other than Natives and Asiatics for the Year ended June 30th, 1927.

Cause of Death.	0—1 years.	1—5 years.	5—10 years.	5—10 10—15 15—20 years. years.	15—20 years.	20—25 years.	25—35 years.	35—45 years.	45—55 years.	55—65 years.	65—75 years.	over 75 years.	Total
	M. F.	M. F.	M. F.	M. F.	M. F.		M. F. Males Females						
Measles	1		1		1	1			-	1	1		-
Influenza		1	1		!						1		1
Dysentery	_	1			1				1	1	1		-
Tubereulcsis				-		-	-	1	г	1			2 3
Cancer				1	1	-	1						-
Meningitis		-						1	1				-
Epilepsy						 				1	1		
Diseases of the Heart	1		1	-	1	1	1	1	1		1 –		1 1
Bronchitis	-				1			1			-		1
Broncho Pneumonia	- 3	1 3	1			1	1	1	1				7
Pneumonia	1	2 1	1	1			_					1	2 3
Pleurisy	<u> </u>]			1	1		1					-
Diarrhoea and Enteritis		-	1	1			1			1		1	2 2
Chronic Nephritis		1	1	1									-
Congenital Delibity	1	1	i	1		1		1	1	1			1 1
Premature Birth				1		 							-
Found Dead	3	1	1	1				1	1				3 1
	(

DEATHS OF ASIATICS within the Municipality for the Year ended June 30th, 1927.

Total	Males Females	4 3 3	2 - 1	-	. O. e.		1 2 3	2 – 1			21 10
	ME	,	1					1			2
over 75 years.	M. F.										
65—75 or years.	H. H.			-							3 1
9	F. M	11									
55—65 years.	M.	1 1	11	-	-	٠	-	1 1			က
45—55 years.	M. F.	21			1 –					1	5 2
4	Fi						!		.		1
35—45 years.	M.	-		<u>i</u>	10	1	1 1	1-1	11		-1 1
25—35 years.	দ	1-1					1 1	-			-
20—25 2 years.	F. M.	1								-	7
	M. F.	1-1						-			1
5—10 10—15 15—20 years. years.	M. F.				1						
10—15 years.	M. F.										
10 1 rs.	3. M.										
5—10 years.	M. F.			-			1 !	1 1	-		0 3
1—5 years	M. F.										
0—1 years.	M. F.	ω		1 1			თ	1 1			5
0- ye	M.									1	က
Cause of Death.		Influenza Tuberculosis	Tumour cerebri Diseases of the Heart	Laryngitis, acute	Broncho Pneumonia	Congestion of Lungs	Gangrene of Lungs Diarrhoea	Nephritis, chronic Purpral Septicaemia	Premature Birth Accident		

37

INFANTILE MORTALITY: All Coloured Races: Causation and Incidence in Districts.

For the Year ended June 30th 1927.

									:													
Zymotic diseases.	otic]	Zymotic Diarrhoeal diseases.	noeal ses.		Branchitis- Congenital Pneumonia. causes.	Cong	ngenital causes.	Menin- gitis.	femin- gitis.	Maras- mus.	-S1	Convul-sions.	ul-	Other diseases.		Total deaths.		Total births.] 1S.	Mort per 1	Mortality rate per 1,000 births	'n
M.	된	M.	圧	Z.	됸	M.	压	M.	Fi	M.	표	M.	된.	M.	표.	M.	E.	M.	표.	Males.	Females. Total.	Total.
Natives:	-	o	t	1.0	10	-	7								-	36	99	79	Z.	69 006	089 04	979 00
Coboolnlests	4	ס א	- c	٦٦ د	0	/ +	H					-		-				10 00	90	500.02	950.04	900.09
Dendals		າ ຕ	ဂ ୯	ကြင	10	c	١٩	-				+-	-	- -				7 1 1 1 1 1 1	07	369.50	250.00 464 64	550.95
Bantule	1	- (0	ו פע	• ,	n (٥	-		1		-	-	-) (1 1 1 1	508.09	454.94	405.94
Томп — —	1	27	1	_	_	30		1		1		1		1	į	ည	d	14	01	428.57	400.00	416.66
Total	-	22	16	25	20	11	13	-				2		2	-	63	52 1	157 1	139	401.21	374.10	388.51
Enrafrican:																						
Locations 1	1	2	, 1	2	2	2	2	1	1	1	1	1		1	1	2		23	31	304.35	161.29	222.22
Town	1	l		1		2		1	1	1	1	1	1	1	1	2	ಣ	∞	2	250.00	428.57	333.33
															-			İ				
Total 1	1	07	07	2	က	4	ಣ	1	1	1	1	1		1	1	6	8	31	38	290.32	210.52	246.38
Asiatics:																						
Location — Town —		22	ص	1 1		- 1		1 1				1	1 1	11	11	භ	4-	29 8	35	103.45	114.28 142.86	109.37 66.66
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Total —	2	23	က	1	1		1	1	1	1		1	ı	1	j	ಣ	5	37	42	81.08	119.05	101.26
All Coloured:																						**
Locations 1	c) -	24 o	20	26	21	r	01 T	 1	1	ī,	1	2	-	2	-	29	57 1		195	343.59	292.30	317.95
TOWII	4	1	-	7	7	n	+	1		1	1	1				α		30	7.7	200.00	333,33	236.29
Grand Total 1	က	26	21	27	23	16	16	- 	1	1	1	2	-	ત્વ	-	75	65 2	225 2	219	333.33	296.80	315.31
																					,	1

DEATHS in the various Institutions in Pretoria for the Year ended June 30th, 1927.

Total. Coloured. M. F.	10	10	157		+	87
	99	- 54	133			157
Total European M. F.	49	81	ಣ		9	08
Euro M.	77	##	ಣ	9	9	125
over 75 years. M. F.	c1	ಣ				ا ت
ovel ye M.	70 	ನ್ ೧೩		===	⊣	0.0
575 years. M. F.	61	6	ب س م		Н	10
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55—65 years. <i>M</i> . F	23	χο	<u></u> ≎:		-	တက
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45—55 years M. F.	9	ಾ ೯೧	31			10
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35—45 years. M. F.	77	<u>→</u>	- 9			9
	15	10	7		— €1	20 35
25—35 years. M. F.	ग ना	01.00	9 (2	6 15
	3 14	671 6151	T 0;	1	1 4	35
20—25 years. M. F.		31				01 03
	9 10	-	ī			9 16
15—20 years. M. F.	2 2 2					7 7 7
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10—15 years. M. F.	ବଳ		50			es es
	।	!		! !		40
5—10 years. M. F.	+-					7-
rs. Fr.	9				-	E-
1—5 years. M. F.	6					9
-1 rs. F.			1		çı ⊢	ಲ್ ಲ
0—1 years. M. F.	10				ಞ —	£ +
	pean	pean	pean	pean	pean	pean
	European Coloured	European Coloured	European Coloured	European Coloured	European Coloured	European
			, , -			
	General and Private Hospitals.	Mental Hospital	Leper Institution	Prisons	Visitors	Total

DEATHS OF CHILDREN under 5 years of age-Non-residents of Pretoria-for the Year ended June 30th, 1927. Age Incidence.

		,																		
	Total under 5 years.	remales	1		27	1	+	ပ္	2) (77 S	η -	۱	20		-	-	-		6.5	
	Total 5	Males. Females.	-	(C) (ઝ અ		က	6	13	21 -	-		31					<u>ي</u>	ĭc	
	-5 trs.	Fi	1	(24	1		4		1			2							
	1—5 years.	M.		27	-	1	0 7	က					6		'			1	-	
Total	under 1 year	면				_	က	ର ଓ	23 0	21 c	7 -	-	13			-	⊣ ⊷		60	
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	11—12 months.	F.					\vdash						1		1					
		M.																	1	
	10—11 months	正.																		
		M.					1											1		
	9—10 months.	E.	1										i		1					
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	8—9 months.	됸								1			က							
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	7—8 months	F. F.						21		! 			2		1		 			
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	6—7 months.	M. F	· 	1		İ	·								-		 		-	
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	5-6 months.	M. I						_					-					1	1	
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	4—5 months.	M.	!				1	-					-					1		
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	2—3 onths, 1	냰											-			-	٦		1	
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	0—1 conths	M. F.						1	. 4	 ``			1				'	2	2	
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		Cause of Death	1. յոջի	er	Diphtheric		nour		altori	ebilit	II.ru			red.	Whooping cough		Broncho pneumonia	Congenital debility		
		se of	European. oping Con	Feve	31: iis	ons	pner	j	al ma	Sal d	n ar	пау		All Coloured.	oo gi	a	pner	al de		
		Cau	Eur Jonin	hoid	hthei ingit	vulsi	ncho	rhoe	genn	genn	maru	מבובת		All	oopir	hthei hilis	ncho	genit		
			Wh	Typ	Dip Mer	Con	Bro	Dia.	Con	Congenital debility	Tyfo	TIIIT		į	M K	Cyr	Bro	Con		

NOTIFICATIONS OF INFECTIOUS DISEASES—EUROPEANS—for the Year ended 30th June, 1927.

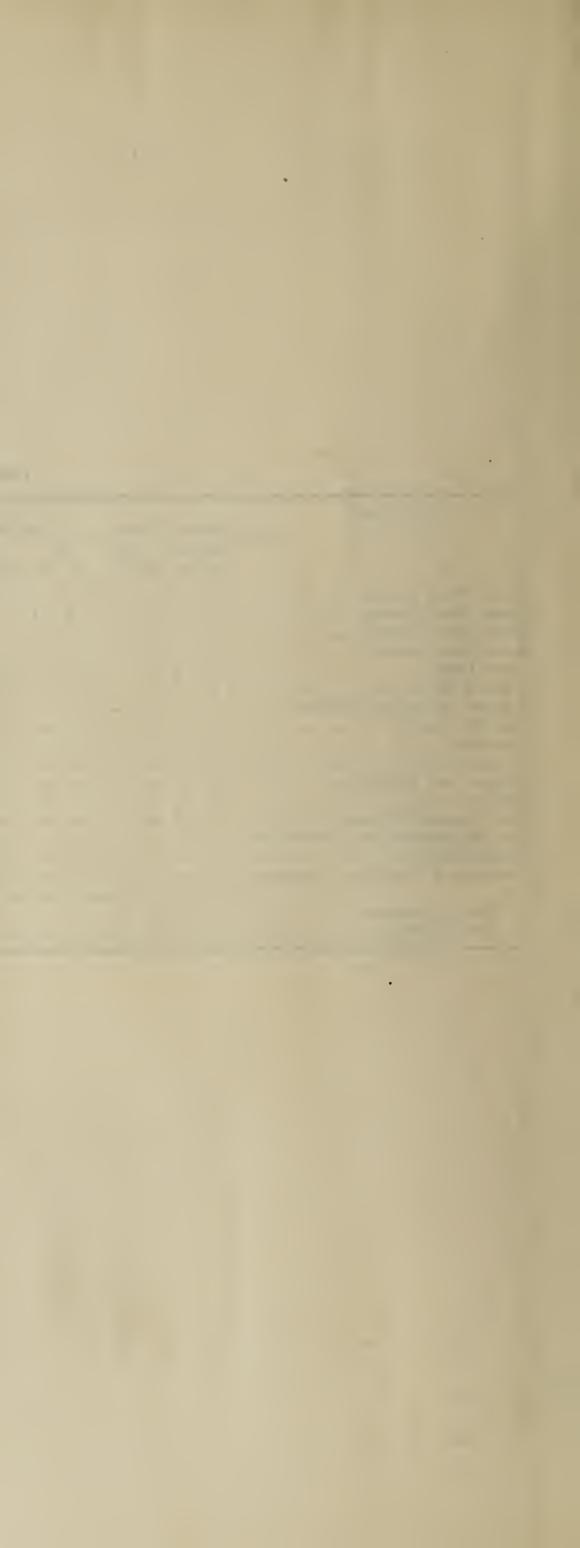
Total. Males. Females. 34 33 5 4 10 15 10 10 98 1111 49 51 6 · 2 1 1 3 1 3 1 4 7	11 242 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
over 75 years. M. F. Ma — — 1 — — 1 — — 9 — — — 9 — — — — — — — — — — — — —	221 1
years. N. F. I. M. F. I	
years. M. F. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
45—55 years. M. F. 1 1 1 1 — — — — — — — — — — — — — — — —	3 1 2 6
35—45 years. I. F	
25—35 3 3 years y years y 1 5 1 1 1 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1	13 5 1 1 2 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1
20—25. 2 years. 5 M. F. M 4 4 1 1 1 - 1 1 - 2 - 2 2 3 - 2 - 1 1 -	2
	9 7 6 7 6 7 8 7 8
15—20 years M. F. 6 1 1 1 1 1 1	12 10 11 11 11
10—15 years. M. F. 8 8 8 1 1 1 1 5 2 3 19 19 — 4 — — — — — — — — — — — — — — — — — —	32 41 11 9 11 9
—10 —10 8 9 1 7 27 27 —————————————————————————————	<u>51</u>
4 1000 1111	39 955 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1—5 Vears. M. F. 5 2	36 8 36
0—1 0—1 N. F. M. F. — — — — — — — — — — — — — — — — — —	17
Typhoid Fever	Typhoid fever

NOTIFICATIONS OF INFECTIOUS DISEASES—ALL COLOURED RACES—for the year ended June 30th, 1927.

tl.	91 외국국적 파이	36	ıc
Total. Males. Females.	13 10 10 10 10 10 10 10	39 24 9	93
over 75. years. M. F.			
65—75 years. M. F.		1 1	
55—65 years. M. F.			2 -
45—55 years. M. F.		2 2 1	2 -
35—45 years. M. F.		20 07 CD	- 2
25—35 years. M. F.	# # # H	13 7 9 — 1 2	10 2
20—25 years. M. F.	8 1 1 1 1 1 1 1 1 1	5 1 1	5 1
15—20 years. M. F.	+	1 4 5 1 2 2	7 1
10—15 years. M. F.	2	1 2	
5—10 years. M. F.	- \infty \cdot \cdot \cdot \cdot \cdot \cdot \cdot \	10 9	1
1—5 years. M. F.		8	
0—1 years. M. F.			
	Typhoid Fever Malaria Diphtheria Measles Whooping Cough Tuberculosis Smallpox Cerebro spinal fever Puerperal fever	Imported:— Typhoid Fever — — — — Tuberculosis — — — —	

DISTRICT DISTRIBUTION OF NOTIFIED CASES OF INFECTIOUS DISEASES: ALL RACES: for the Year ended June 30th, 1927.

	Typhoid Fever. European. Col'd.		Scarlet Fever. E. C.	Diphtheria. E. C.	Measles. E. C.	Whooping Cough. E. C.	Tuberculosis. E. C.	Smallpox. E. C.	Poliomyelitis. E. C.	Fever.	Puerperal Fever. E. C.	Erysipelas. E. C.	Encephalitis. Lethargica. E. C.
North West Central	M. F. M. F. 2 4 — — 1 3 — — 4 1 3 1 2 2 — — 3 4 — — 3 3 1 2 — — — — 4 3 1 — 9 8 1 — 9 8 1 — 1 — — — 1 3 — — 1 3 — — 1 — — —	M. F. M. F. 2 1 — — — — — — — — — — — — — — — — — —	M. F. M. F. 2 — — — — 1 5 — — 1 1 — — 1 1 — — 1 1 — — 1 1 — — 1 1 — — 1 1 — — 1 1 — — 1 1 — —	M. F. M. F. I 1 1 1 2 1 3 4 1 2 2	M. F. M. F. 6 3 — — 3 9 — — 3 6 — — 10 8 — — 1 1 — — 9 12 — — 1 2 — — 3 9 — — 45 46 2 — 12 13 1 — 1 1 — — 1 1 1 — 1 1 1 — 1 1 — —	F. M. F. M. F. - 3 4 — — — — — — — — — — — — — — — — — —	M. F. M. F. 1 — 1 — 1 — — — 1 — — — 1 — — — 1 — 1 — 1 — 1 — 1 — 1 — 1 — — — 1 — — — 1 — — —	M. F. M. F	M. F. M. F.	. ·M. F. M. F. 1 — — — 1 — — — 1 — — — 1 — — — 1 — — — 1 — — — 1 — — — 1 — — —	M. F. M. F. M - 2 - 1 1 - 1 1 - 2 1 - 1 2 - 1 2 - 1 2 - 1 2	1. F. M. F. 1 — — 1 — — 3 — — 1 — — 1 — — 1 — — 1 — — 1 — — 1 — — 1 — — 1 — —	M. F. M. F.
Total European	34 33 — —	5 4 — —	10 15 — —	10 10 — — 9	98 111 — —	- 49 51 — —	6 2 — —		1 1 — —	3 1 — —	- 7 $-$ 4	7 — —	1



NOTIFICATION OF INFECTIOUS DISEASES—ALL RACES—per month for the Year ended June 30th, 1927.

1000			Typhoid fever.	Malaria.	Scarlet fever.	Diphtheria.	Measles.	Whooping Cough.	Tuberculosis.	Smallpox.	Poliomyelitis.	Cerebrospinal fever.	Puerperal fever.	Erysipelas. Encephalitis	lethargica.
1926. July.	European Coloured	{Residents Imported Residents Imported	$-\frac{6}{2}$	1 	6 	1 - 1 -	3 	$\frac{10}{1}$	_ 2 _	_	=	2	1 _ _	1 -	- - -
August.	European Coloured	{Residents Imported Residents Imported	1	_ _ _ _	6 	2 1 —	14 — —	14 — —	1 1 1		_	$\frac{1}{1}$	_ _ _		- - -
Septemb	European eer. Coloured	Residents Imported Residents Imported	1 - -		1 1 —	2 - 1 -	99 8 	14	1 	_ 1 _	_		1 	1	- - -
Sctober	European Coloured	{Residents {Imported {Residents {Imported } Imported } }	2 6 3 —	1 _ _	2 	6 _ _	65 6 	6 1 1 —	- 3 2		_		1 	1	- - -
Novemb	European er. Coloured	{Residents {Imported {Residents {Imported {Imp	11 13 4 2	3 -	_ _ _ _	<u>1</u>	10 - 2 -	2 2 	$\frac{1}{\frac{1}{2}}$		_	$\frac{1}{2}$	1 	2 — — — — —	- - -
Decembe	European er. Coloured	{ Residents { Imported } Residents { Imported }	7 18 7 9	_ _ 1 _	1 	2 — —	6 	4 1 2	1 1 1		_	1	1 	1	- - -
1927. January	European Coloured	Residents Imported Residents Imported	8 5 4 7	_ _ _	_ _ _	1 1 —	3 	8 	$\frac{-1}{2}$		_	_ _ _	1 	_ 1 	t - -
Februar	European y. Coloured	{Residents Imported Residents Imported	$\begin{array}{c} 6 \\ 7 \\ \hline 2 \end{array}$	_ _ _ _	_ _ _ _	_ _ _ _	2 	8 3 1 —	$\frac{2}{1}$		1 	1 _ _	_ _ 1 _	2 — — — — —	- - -
March.	European Coloured	Residents Imported Residents Imported	8 1 3 —	1 - -	_ _ _	2 _ _	1 	10 1 1 —	1 4 —	_ _ _		_ _ _	1 1 —	1	- - -
April.	European Coloured	{Residents {Imported } Residents {Imported }	16 12 3 4	·—	1 - -	1 1 —	2 	5 — —	1 - -	_ _ _	1 		_ _ _ _	1 — — — — —	- - -
May,	European Coloured	{Residents {Imported } Residents {Imported}	6 2 1 1	2 2 —		2 1 —	1 - -	8 — —	$\begin{array}{c} 1\\2\\1\\-\end{array}$		=			1 -	-
June.	European Coloured	Residents Imported Residents Imported	2 2 1 —	1 - -	8 —	1 1 —	3 1 —	1! _ _	_ 1 2			_ 			-

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